MOUNT COOK

NATIONAL PARK HANDBOOK

MOUNT COOK NATIONAL PARK HANDBOOK

Edited by

W. P. PACKARD

MOUNT COOK NATIONAL PARK BOARD
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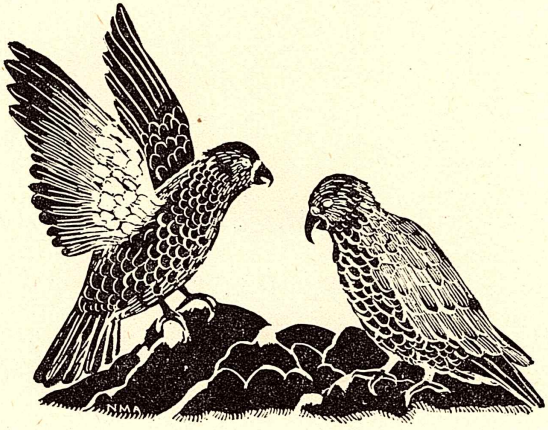

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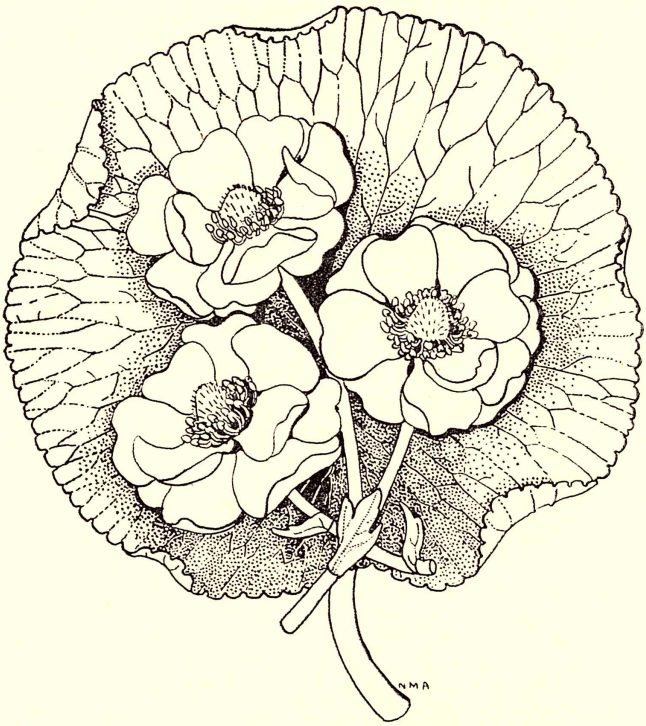

Ranunculus lyallii, the Great Mountain Buttercup

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FOREWORD

Right from the inception of the Board in 1955, members have been aware of the need for a handbook to inform the public of the attractions of the Park. The Board has published this book for popular use from script supplied by its members and officers, rather than delay to compile a more comprehensive work.

Editing was placed in the hands of A. P. Thomson and W. P. Packard, but the latter alone is responsible for the final editing. The Board gratefully acknowledges their services and further assistance in contributing Sections I and II (Packard) and VIII (Thomson). H. J. Stevenson contributed IV, J. P. Cook V, A. M. Cookson VI, and J. W. Rolleston VII and IX. Section X was contributed by the Board's former secretary, D. C. Morse, and Section III by H. E. Connor, who has subsequently been appointed to the Board.

Photographs were supplied gratis by Mr H. D. Ashurst, N.Z. Aerial Mapping Ltd., and National Publicity Studios. The Board is greatly indebted to Miss Nancy Adams, formerly of the Botany Division, Department of Scientific and Industrial Research, for her delightful line drawings, and to Mr J. C. Meale, Chief Surveyor, Christchurch, and his staff for the maps. The Editor in particular is grateful to Mr John Pascoe for his help and advice. The handbook has the blessing of the National Parks Authority and initial publication was made possible by a grant from that body.

Although Mount Cook is essentially a mountain and glacier park, National Parks are for all and the Board is concerned therefore to cater for the average citizen with his wife and children, as well as for climbers, skiers, and visitors from overseas. This book may help to interpret the Park to the people and increase their enjoyment of this mountain fastness.

T. W. PRESTON,
Chairman

November 1959

INTRODUCTION

Mount Cook, 12,349 ft, is both the highest and best known mountain in New Zealand. Rightly it gives its name to the National Park which surrounds it. In all, 173,000 acres of ice, snow, rock, tussock and riverbed make up the Mount Cook National Park. Within the Park, or located on its bounding ranges, are the majority of New Zealand's great mountains, and all save two of those summits over 10,000 ft in height. Named peaks are many—but from all viewpoints, Mt. Cook can be seen rising above the rest. Though there is much plant and animal life of unique interest it is the superb, accessible alpine scenery which is the prime feature of the Park. Mt. Cook sets the seal on the character of the area. The Maoris are thought to have called New Zealand's highest mountain *Aorangi*—freely translated as the Cloud Piercer—in a poetic way as appropriate a name as that belonging to the great 18th Century navigator who rediscovered the land. Seen on the usual approach to the Park from Lake Pukaki, Mt. Cook is the dominant peak in a region of startling ice, snow and rock summits. Across forty miles of pale blue lake and pale grey riverbed, the great tent-shaped, ice-sheathed roof of New Zealand juts into the skies. The nearer to the Park, the more mighty Mt. Cook becomes. Even though such a tremendous ice precipice as that of Mt. Sefton or the delicate beauties of an alpine flower occupy our attention, ultimately we turn again and look at Mt. Cook.

Brief Topographical Description

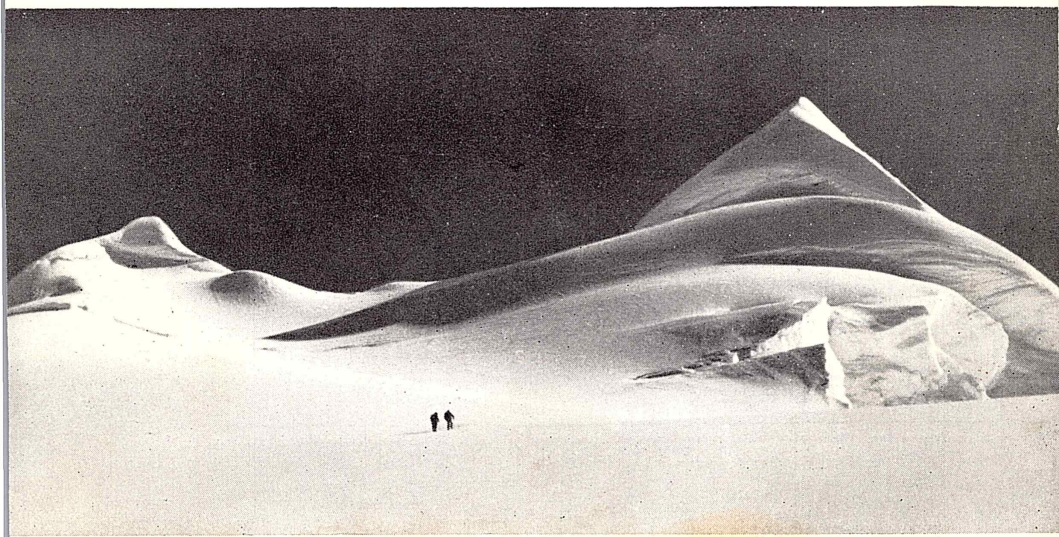
The Park is long and narrow. It runs for some forty miles along the crest of the Southern Alps, the watershed between Westland and Canterbury. At its widest, however, the eastern boundary is a mere ten miles from the Main Divide. Over a third of the Park is made up of permanent snow and glacier ice.

The boundaries of the Park may be seen on the accompanying map at the end of the Handbook. Mountain ranges encircle it, and subsidiary ranges cut it up into a number of great valleys, the floor of each being largely or partially occupied by a glacier. The Park comprises the glacier headwaters of two of the tributaries to the Waitaki River, a river which drains the Mackenzie intermontane basin, one of the great hydro-electric power sources in

The Park seen from the head of Lake Pukaki

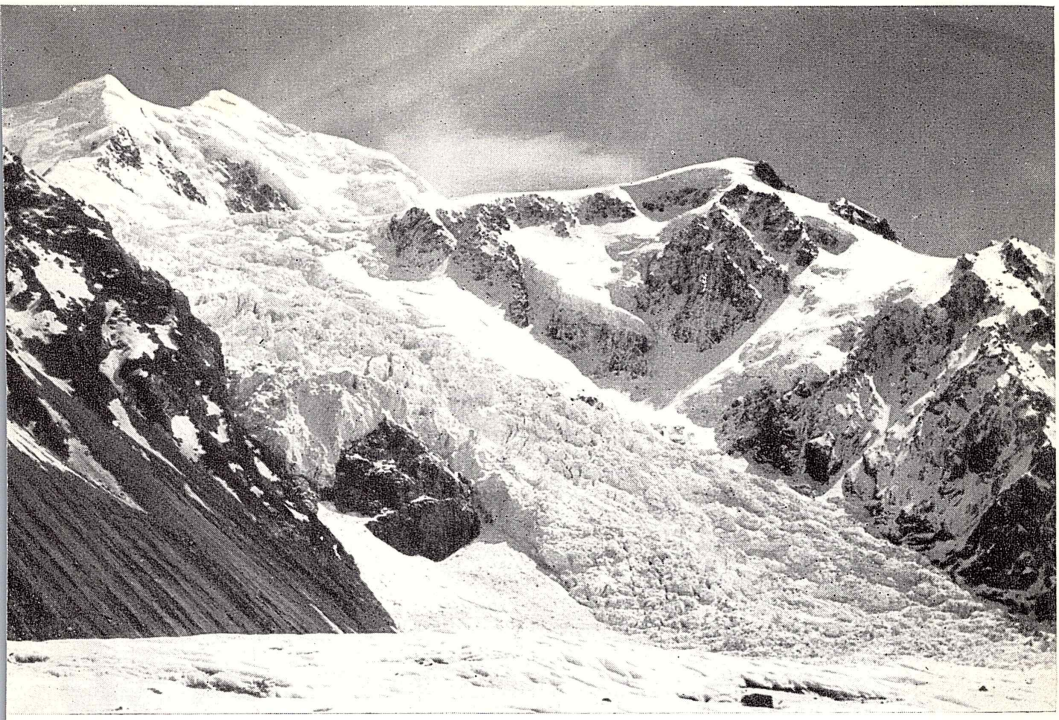
Photos H. D. Ashurst

The twin summits of The Minarets



Mt. Lendenfeld from the north shoulder of Mt. Tasman

Photo H. D. Ashurst



The Hochstetter Ice Fall from the Tasman Glacier. Mts. Silberhorn and Tasman beyond. Glacier Dome right sky line.

Photos H. D. Ashurst

Malte Brun Hut (*right foreground*) and the head of the Tasman Glacier

On the grand traverse of Mt. Cook: the high peak from near the middle peak.

Photo H. D. Ashurst

New Zealand. The Main Divide—the Southern Alps—forms the western boundary, and runs north-east–south-west, somewhat crookedly it is true. Nowhere does it fall below a mile high, and there are no low saddles giving easy access across it between East and West Coasts. Indeed there are only two gaps under 7,000 ft in this icy rampart. Only three mountains above 10,000 ft in New Zealand are not located on it, and these are all close by. From the Main Divide in the west, subsidiary ranges run eastwards. The ice which accumulates on the Main Divide, and to a lesser degree on these drier subsidiary ranges, tumbles down from the high basins. Thus between each range flows a great glacier, generally covered in rock debris near its snout. From south to north, the Sealy Range, running S.W./N.E. encloses the Mueller Glacier. The Mt. Cook Range (on which the three peaks of Mt. Cook are located) runs north to south, and on the west encloses the Hooker Glacier. The Mueller and Hooker glaciers both reach to easy walking distance of The Hermitage, and are a mere mile apart. Their joint melt waters form the Hooker River. On the east between the Mt. Cook Range, the Main Divide, and the Malte Brun Range (running N.E./S.W.) lies the Tasman Glacier—eighteen miles long, up to two miles wide. The Tasman River, originating at the terminal face of the glacier, flows in many rapidly changing channels across the wide Tasman Valley to join Lake Pukaki some fifteen miles beyond the Park. Between the Malte Brun Range and the Liebig Range is the Murchison Glacier, neither as long nor as large as the Tasman. It is sheltered from the heaviest snow falls for it lies east of the Main Divide. The Murchison Glacier does not join the Tasman Glacier, which flows right across the end of the valley six miles downstream. The Murchison River flows hard against the valley side between it and the Tasman Glacier ice before it joins the Tasman. The Liebig Range with its sparse glaciers parallels the Main Divide, forming the eastern boundary of the Park for the greater part of its length. Where the Liebig Range joins the Main Divide, the Park spills over the Range, and takes in the headwaters of the Godley River. The Park boundaries downstream in the Godley are the Rutherford Stream (west bank) and the McKinnon Stream (east bank). From the Main Divide, and from the isolated Mt. D'Archiac at the northern end of the Two Thumb Range, flow the feeder glaciers of the Godley Glacier, and the Classen. Eighteen miles down valley of the Park boundary the Godley River joins Lake Tekapo.

Mount Cook National Park thus falls into two parts—the Tasman Valley and tributaries, and the Godley Valley and tributaries.

Access to the Tasman Valley is easy, for a main highway serves The Hermitage, and a road is always maintained to the Ball Hut, seven miles up from the snout of the Tasman Glacier. To gain access to the Godley headwaters, however, jeep, horse, or foot slogging up the miles of riverbed from the road end at Lilybank Station are necessary. None of the main valleys is without huts, but almost all huts require mountaineering experience or a guide to reach them safely. Ball Hut is the focus of ski-ing in the Park. The main aerodrome for the area is almost on the south-west margin of the Park, four miles from The Hermitage, but there is a new landing strip just beside the hotel itself.

On the Hermitage Terrace, linked by a daily bus service to Christchurch and Timaru, is The Hermitage hotel, as well as a number of houses, including that of the Chief Ranger. His house was designed by Paul Pascoe, and built by the Park Board in 1958. A general store, youth hostel, motor camp and cabins are also on the Terrace. About a mile up valley, near the site of a former Hermitage, are the huts of the mountain and shooting clubs.

The Hermitage Terrace therefore is the immediate focus of attention to visitors to the Park, and it is in all ways the centre of activities—highly accessible, and commanding almost the best views of superb alpine scenery.

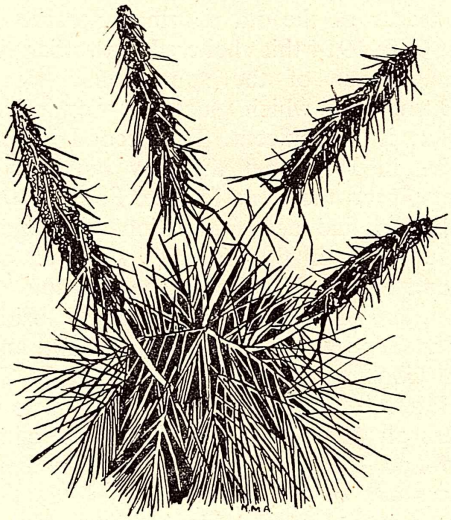
Historic Notes

As a National Park, the Mt. Cook region is only a recent creation (1953), but the area has long been recognised as a national playground. In 1862, Julius Haast, then provincial geologist to Canterbury, gave the first detailed account of the scenic splendours he had just explored. This Victorian scientist, later Sir Julius von Haast, wrote of "Alpine peaks everywhere glistening with snow and ice, frowning rocky precipices furrowing their sides and, above them all, the bold and majestic form of Mt. Cook . . . standing out boldly against an azure sky." He described also the luxuriant native vegetation of tall spaniards, wild irishmen, forest and scrub that was so soon to be reduced by fire and grazing, and is only now beginning to slowly return. In the next twenty years various parties, chiefly surveyors, geologists and pastoralists, visited the area, and fell within its spell.

In 1885 the first part of the present Park was reserved for recreation purposes, and a similar reserve in 1887 meant that both the Hooker and Tasman valleys have been kept for the nation's use for almost threequarters of a century. These two reserves included almost two-thirds of the present Park. The then Commissioner of Crown Lands, John H. Baker, himself an explorer, pleaded successfully with the Government of the day "to conserve for all time a place whose beauties it would not be easy to exaggerate, and which will undoubtedly be one of the attractions of the globe." By the time Baker wrote this in 1887 a rudimentary hotel for visitors to Mt. Cook had already been established by Mr F. Huddleston. This was the first of the three hotels the Park has known, all called The Hermitage, and it was built in the shelter of the old terminal moraine of the Mueller Glacier in 1886. In 1914 this sheltered but rather viewless site was abandoned in favour of the sunny valley-side terrace near Governor's Bush, from which place the view of both Mt. Cook and Mt. Sefton is magnificent. The second Hermitage was destroyed by fire in 1957, but the new buildings which rapidly replaced it remain on the same terrace. For over 75 years people have been able to find accommodation and enjoy "one of the most wonderful sights in the Colony". After an initial ten years of private management, The Hermitage was sold to the Government for £900, and the development of tracks, bridges and mountain huts undertaken by the Tourist Department, and subsequently by the Mount Cook and Southern Lakes Tourist Company which leased The Hermitage from the Government from 1927 to 1942. Over the years all the main peaks have been climbed—by both New Zealand and overseas alpinists of many nationalities. Mt. Cook itself was one of the first to be climbed (1894). But The Hermitage has served a much wider public than the mountaineer, and hundreds of thousands of visitors have relaxed, walked and skied among the alpine parklands, and on the great Tasman Glacier. The Southern Alps, their heart centred on The Hermitage and Mt. Cook region, became known to people all over the world. So also did the New Zealand guides—such as the Graham brothers, Vic Williams and Mick Bowie who led generations of visitors on the difficult, and mostly not so difficult, climbs and excursions.

Two more additions were made to the Mt. Cook reserves—the Murchison Valley and Glacier area in 1917, and the glacier headwaters of the Godley Valley, adjoining the Murchison in

1927. With the passing of the National Parks Act, all four public reserves were united into the one National Park and for the first time the area gained independent administrative status. The Park is now controlled and administered by a board specially appointed for the task by the Minister of Lands. Its greatest concern is to develop and expand facilities so that the nation can enjoy to the full the natural features of the Park.



Wild Spaniard

THE MAKING OF THE LANDSCAPE

Running water and moving ice—these two simple physical phenomena—have been the forces at work, sculpturing the valleys and mountain scenery of the Park. There is no great variety of rock present. It is all greywacke—hard grey sandstone. But the greywacke is itself not without variety—sometimes greenish grey, dark or light—sometimes coarse grained, other times finer—and occasionally traversed by irregular veins of white quartz or weaker black and red beds of finer sediments called argillite and jaspillite respectively. The greywacke rock is formed from silt and sand laid down under the sea about 150 million years ago. However, the mountains themselves are much younger, and their present form and character results from the sculpturing effects of water and ice associated with the Ice Age beginning one million years ago, an Ice Age whose climatic fluctuations may not yet have finished. From any high viewpoint, such as Mt. Sebastopol or Sealy Lakes or even from the road approach along the Tasman Valley, it is easily seen that the summits of the mountain ranges are all of the same general altitude. These mountain ranges have, in fact, been carved from an elevated tract of country by the erosive down cutting action of the rivers of water and ice between them. The geomorphologist sees this sort of action going on all round him, for valleys are normally made by the rivers which occupy them. The valleys in the Mount Cook National Park, like so many in the South Island high country, are unlike river valleys of usual steep hill country, for they are flat bottomed, straight, steep walled, instead of V-shaped and winding. Spurs from the Sealy or Mt. Cook, Malte Brun or Liebig ranges do not run out on to the main valley floors, but they end abruptly, high on the main valley walls. These main valleys of the Hooker, Murchison, Tasman or Godley are smooth walled U-shaped troughs—a valley form which runs downstream far beyond the confines of the Park. The relatively straight U-shaped valley form is the unmistakable product of an ice-eroded valley, and the glaciers of today are insignificant compared with the great glaciers which only a few tens of thousands of years ago flowed from the Main Divide down valley even beyond the three Mackenzie Basin lakes. These glaciers advanced and retreated repeatedly and at each

maximum advance, ice filled the valleys at least to 6,000 ft above present valley floor levels. Erosion by ice during each glacial advance, combined with river erosion during each retreat, widened, progressively straightened and deepened the valleys. The last retreat of ice left behind the U-shaped valleys of today, with side valleys left perched, hanging above the main valley. Such upper mountain slopes and side valleys are characterised by armchair like hollows, called cirques, today often occupied by little glaciers. While most of the effects of ice and flood waters associated with its melting have been erosional, the final wasting stages of the retreating glaciers have left dumps of moraines—rough, stony ridges running along the valley sides (lateral moraine) such as is followed by the road alongside the Tasman Glacier to the Ball Hut, or terminal moraines, like White Horse Hill, which marks one old standstill stage of the Mueller Glacier. Lake Pukaki and Lake Tekapo are both dammed back by terminal moraines, which bear mute witness to one of the maximum periods of ice advance. The fretted ridges of the Main Divide and of the subsidiary ranges are not accidental—for these are the direct results of cirques cutting into opposite sides of the same ridge. All the glaciers today are in retreat, but it is very slow, as is the glacier movement. The upper Tasman Glacier moves forward about two feet daily, but the rate diminishes towards the glacier snout. Where the glacier crosses irregularities in its bed, or where it falls steeply, great cracks or crevasses occur. These are always opening and closing, but the zone of crevasses remains in the same place. The depth of the present glaciers is unmeasured, but the Tasman Glacier in the vicinity of Ball Hut is probably about 700 ft thick.

The final features in building the landscape of the Park are the great fans of shingle spread by the flood waters from the melting ice, and by the present rivers emerging from side valleys and joining the main valleys of the Tasman and Hooker. In many places these rivers have cut deep notches in the glacially smoothed valley sides.

With the retreat of ice and snow and the ameliorated climate has come the clothing of valley side and river bottom with vegetation. About The Hermitage, where annual rainfall averages 150 inches, luxuriant scrub and forest established themselves on the valley sides to about 3,500 ft, and tussock grasslands covered the drier parts and the valley bottoms. Much of this plant cover was destroyed and altered by fires and grazing before ever the original reserves were established in the 1880's and only the few

acres of Governor's Bush remains of the once much more extensive beech forests. With the elimination of fire, sheep grazing and noxious animals, however, the native plant communities will have every chance of regenerating to their original area and luxuriance.

The Hooker Valley and Mt. Cook seen from The Hermitage. Mountain Flax, Snow Tussock, Mountain Daisy (*Celmisia coriacea*) and Tree Daisies soften the harsh lines of rock ridge and glacier peaks.

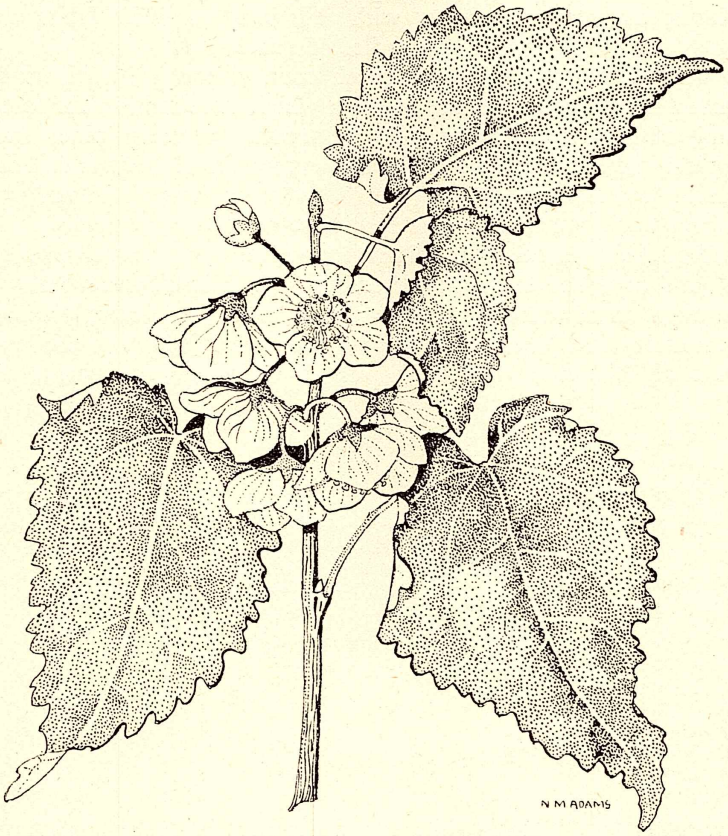
SOMETHING ABOUT THE PLANTS

Solemn green vegetation surrounded by stern mountains, grassland lower down in the valley and plains, formidable thickets of sharp-spined matagouri, and almost impenetrable subalpine scrub: these may not seem inviting when The Hermitage is first reached. Yet here, overtopped by the mountains and the glaciers and hidden from immediate view, visitors can find the erroneously named Mt Cook lily but better called Mountain Buttercup, for in truth it is the buttercup *Ranunculus lyallii*. Dr Cockayne wrote of its flowers, "They are pure white, the petals at times so numerous that the flower looks like a semi-double, and 30 blossoms to a stalk, each nearly three inches in diameter are quite usual. It may easily be seen then, what a glorious spectacle is a hillside clothed as far as the eye can see with close colonies of this noble plant!" White-flowered snow gentian, also described by Cockayne as a noble plant, can be commonly seen. In the shrubland, usually behind the matagouri thickets, is the mountain ribbonwood, an elegant deciduous tree with white flowers not unlike cherry blossoms. Against the many shades of green of the general vegetation, these three white-flowered plants capture attention.

Some thirty years ago Professor Arnold Wall wrote the handbook, *The Flora of Mt. Cook,* in which he lists over 300 species of plants which he found in the National Park. The realisation that there are so many species of plants in the Park will force on visitors Arnold Wall's conclusion that the pure beauty of the mountain daisies, buttercups, gentians and forget-me-nots is "simply poured into his lap". Close to The Hermitage the finest daisy and finest buttercup in the world can be seen. Were this not enough, at 9,000 feet up on Malte Brun a buttercup, gentian, forget-me-not and hebe grow in an area where vegetation, as such, finishes at about 6,000 ft.

A visitor with only a short time to spend can see these plants, for about The Hermitage there are samples of the large areas of scrub and grassland and herbfield that serve as a guide to the rest of the vegetation. This description of plants in the Mount Cook National Park has been organised around the most common walks made by visitors.

Governor's Bush is a remnant of what was a large area of



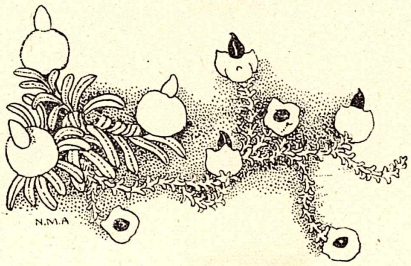
Mountain Ribbonwood

silver beech forest. This forest has here as associated trees, mountain totara; mountain ivy tree, its large leaflets in threes, glossy, thick and toothed, and its fruits succulent and purple; and broadleaf, a large tree with light-green shiny leaves. An occasional lancewood with very long toothed juvenile leaves may be seen. On the forest floor are a few seedlings of silver beech, seedlings of mountain totara, and ferns, too, in particular *Polystichum*

vestitum. Lagenophora, a small white-flowered creeping daisy, is abundant on the forest floor. The shrubs are chiefly species of *Coprosma,* twiggy, divaricating, small-leaved, brightly berried plants; mountain wineberry with red, pink or white fruits; and grass trees with ascending bundles of thin leaves.

The forest trees of silver beech soon give way higher up the valley side to scrub plants, some of which were seen in the forest, and other scrub species such as mountain celery pine, snow totara, mountain pine, snowberry, mountain ribbonwood, koromiko, and coprosmas. Of the herbs, *Anisotome haastii* and *Myosotis,* a white flowered forget-me-not, are outstanding.

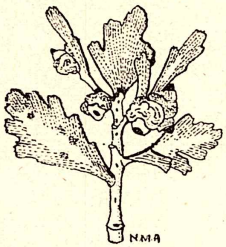
Red Lake and Sebastopol are attractive names and the walk is a good one. The track after crossing Black Birch Stream leads up through an abundance of snow totara, mountain celery pine and mountain pine. These coniferous shrubs are a feature of the lower part of this walk. Mountain pine is an olive-green shrub with



Snow Totara (*left*) and Mountain Pine (*right*)

branches like whips, while the fruits rest in fleshy cup-shaped white arils. The taller mountain celery pine has its branches flattened, giving the appearance of lobed leaves. Its fruits are borne in clusters of pinkish red arils. Snow totara grows as a prostrate shrub or as an erect dense bush, its leaves are thick and blunt and the nut is borne on a conspicuous red succulent aril.

The twiggy coprosmas, mountain wineberry, and *Hymenanthera* are all common in the scrub with manuka, cassinia, wide-leaved tutu and bracken fern. Heath plants are everywhere, patches of patotara, *Pentachondra, Cyathodes* and snowberries all bear red pink, orange or white berries in late summer and autumn. *Drapetes dieffenbachii* grows among the taller grass trees.

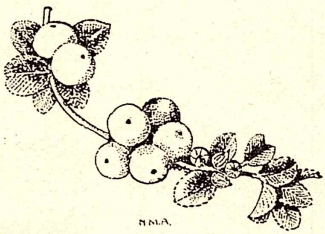


Mountain Celery Pine

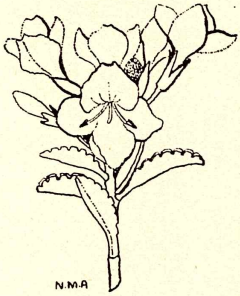
On damp banks *Blechnum penna-marina* and filmy hymenophyllums are common ferns. Lycopodiums and mosses are abundant. The red berried *Nertera* hugs the ground, and *Parahebe lyallii* with its white flowers creeps amongst the other herbs. *Anisotome* and *Angelica,* blue harebells, *Helichrysum,* narrow leaved mountain daisies and many others all abound with the pink bidibidis and small *Haloragis.*

Red Lake, named because of the red leaves of the pondweed growing in it, rests in a hollow at the base of the cliffs of Sebastopol. It is a typical mountain tarn ringed by a spongy area of close-growing bog plants in which grows *Drosera arcturi* with its leaves modified for catching insects. Near the lake is snow totara in company with several tree daisies. Grass trees are here in plenty, also the low-growing *Suttonia nummularia,* with its rounded bronze leaves and violet berries. Rushes, sedges, ferns and small grasses carpet the ground and, with hebes, coprosmas and the feathery-foliaged narrow-leafed tutu, surround this little lake.

Above Red Lake is the 4,800 ft summit of Sebastopol. In the rocky crevices grows the renowned vegetable sheep. These hard grey cushions are tightly packed branches of woolly leaves. Edelweiss, with felted white flowers, abounds on the cliffs. Dr Cockayne



Suttonia nummularia

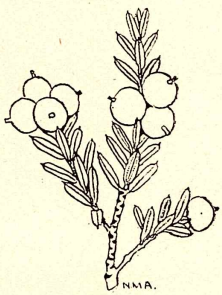


Hebe macrantha

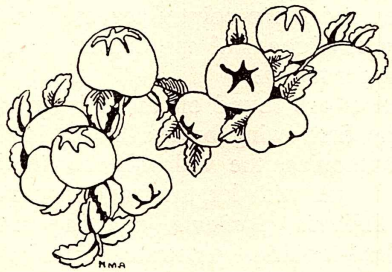
claimed that it and the North Island edelweiss far surpassed their Swiss namesake in beauty. The yellow-flowered daisy *Senecio haastii,* with its white leaves, glistens among the rocks. A heathy association of red-berried *Pentachondra,* patotara, *Cyathodes colensoi* and *Drapetes dieffenbachii* grows below the rocks. In the shingle, where prostrate snow totara makes streaks of olive-green, the large-flowered *Hebe macrantha* may be seen. But it is the plants growing in the rock crevices that are the interest of this climb; rosetted, tufted, and cushion plants, felted and woolly leaved, they are typical in their adaptation to the rigours of altitude and climate.

Subalpine scrub can be better seen on the walk to Kea Point. On the way from The Hermitage there is an open shrubland with matagouri, ribbonwood, and snow totara as the most noticeable species. Here the three climbers, prickly bush lawyer, climbing pohuehue, and *Clematis marata,* straggle through the tall scrub and smaller divaricating plants. Soon the great Mountain Buttercup shows in the more open spaces. Violets, harebells, *Anisotome*

Cyathodes colensoi



haastii, silver cotton plant, yellow-flowered *Craspedia uniflora,* and helichrysums are common herbs. The ground is carpeted by the slender *Stellaria gracilenta,* bidibidis, cotulas, small ferns, muehlenbeckias and grasses. Shrubs that define the plant association are mountain celery pine, mountain totara and the tree daisies. Several of these grey foliaged tree daisies are strongly scented. White-flowered mountain ribbonwood is plentiful here, as also are the sharp-spined matagouri, twiggy wineberries, coprosmas, and *Hymenanthera.* These divaricating shrubs are a feature of the Mount Cook National Park. Grass trees, the sharp-pointed rosettes of wild spaniards, the fine-leaved black-berried tutu, hebes and snowberries are common low-growing shrubs. The snow tussock (*Danthonia flavescens*) and the "false snow grass"



Snowberry

(*Schoenus pauciflorus*) are also to be found. Arnold Wall is constrained to remark of this subalpine scrub association: "In the proper season, November-December, the rather sombre face of the scrub is lightened and diversified by the large white masses of *Ranunculus lyallii* and *Anisotome haastii.*" From the Kea Point track one can see trees of mountain totara in the scrub on the side of the Sealy Range.

Regrettable though it is, there are plants alien to the flora of New Zealand in the National Park. Among these are foxglove, browntop, fescue, hawksbit, catsear, cocksfoot, and sorrel. On the track to Kea Point are wild cherries, while it is foxglove that makes very strong patches of colour on the Sealy Range. *Verbascum thapsus,* another introduced plant called in Sweden "Royal candles", and "woolly mullein" or "tobacco plant" here in New Zealand, is frequently seen colonising broken ground.

Another favourite walk is that along the Hooker valley over the swing bridges and on towards the Hooker Glacier. The track leads up through a grassland now much altered, but in which blue, fescue, and silver tussocks can be seen among the chewings fescue and browntop. White and blue flowered harebells, small geraniums, woodrushes and *Craspedia uniflora* with its yellow button-like flowers are dotted in the turf. Soon you come to the moraines, and here thickets of dull-green matagouri run in bands at the bottom of the broken rocks, red-arilled snow totara spreads across the rock, and needle-sharp wild spaniards are common. Between the walls of rocks that are the moraines, the grassland is that of the river flats, but there are mountain celery pines growing amongst it and the coloured fruits of snowberries are prominent. Spread tightly over rocks, too, one finds twiggy hymenanthera, and, everywhere, the dwarf heath, patotara, with its orange berries and sharp-pointed leaves. Beside the first swing bridge, shining green broadleaf can be seen among the mountain toatoa and the snow totara.

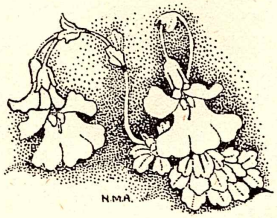
Colonising plants are found on the shingly, stony side of the moraine after the first swing bridge. There is the delicate grass *Poa lindsayi*, danthonias, the willow-herb with black stems and red leaves, wood rush with large triangular brown heads, white-flowered small *Stellaria glacilenta,* creeping pohuehue, and the grey, almost dead-looking, prostrate *Helichrysum depressum.* Arnold Wall says that it is sometimes called "Sticks". Here, too, are snowberries, scabweeds, wild spaniards, grass trees, blue and red berried prostrate coprosmas and pink bidibidis.

Between the two swing bridges beside the Mueller moraine, the plant association is different from that first seen and that to be seen further up the track. The vegetation is shorter, there is less plant cover, the rock is in smaller chunks and is more obvious. Here the plants are much the same species as in other sites, but not as luxuriant.

By now you are climbing along the track beside the rock face to the second swing bridge and here, perched just above you, are some of the joys of the Park. Silver-white edelweiss with its felt-like flower heads hangs from the rock; the mountain daisy, *Celmisia petiolata,* with purple bases to the large membranous leaves; aniseed, a highly aromatic plant; the small flowered *Geum parviflorum;* forget-me-nots, leafless native brooms, willowherbs, filmy ferns near the trickles of water: all these abound. *Poa novae zelandiae* shines on the rock and *Festuca matthewsii,* rather more

blue than the hard tussock of the grassland, grows near the track.

Ourisia caespitosa creeps white flowered over the rock, while the groundsel, *Senecio haastii,* overhangs. Snow berries, woodrushes, *Euphrasia, Celmisia coriacea,* scabweeds, *Anisotome* (kin to aniseed, but with small aromatic leaflets), are the most noticeable and more attractive of the plants on the rock on the narrow track. Many of them grow on the steep slopes down into the river. Across the bridge you pass the flat, densely compacted cushions of *Hymenanthera,* the tree daisy, *Olearia nummularifolia, Hebe subalpina,* then on to an association of hebes, orange-fruited coprosmas, fine-leaved tutu, and wild spaniards.



Ourisia caespitosa

Further on is a snow tussock association dominated by tall tussocks in single clumps. In the good flowering years they put forth seed head plumes as attractive as those of toetoe. Hard tussock grows dwarfed amongst the snow tussock. Here there are many colonies of great mountain buttercups and many plants by now very familiar.

Press on to Sefton Stream, cross the narrow foot-bridge and look back towards The Hermitage. A gigantic rock garden reaching up to the wall of the moraine is before you. Massive rocks jut from the snow tussock. Colonies of mountain buttercups fill the crevices. From November to January their brilliantly white, gold-centred flowers shine amongst the rocks and tussocks. There are wild spaniards with their tall spiny yellow heads, hebes in tight bushes covered with white flowers, white violets tinged with purple, scented native daphne, snow gentians bearing corymbs of immaculate white flowers and, by contrast with white and pale-blue flowered plants, there is a magnificent bronze forget-me-not, *Myosotis macrantha.* Here also are legions of an outstandingly

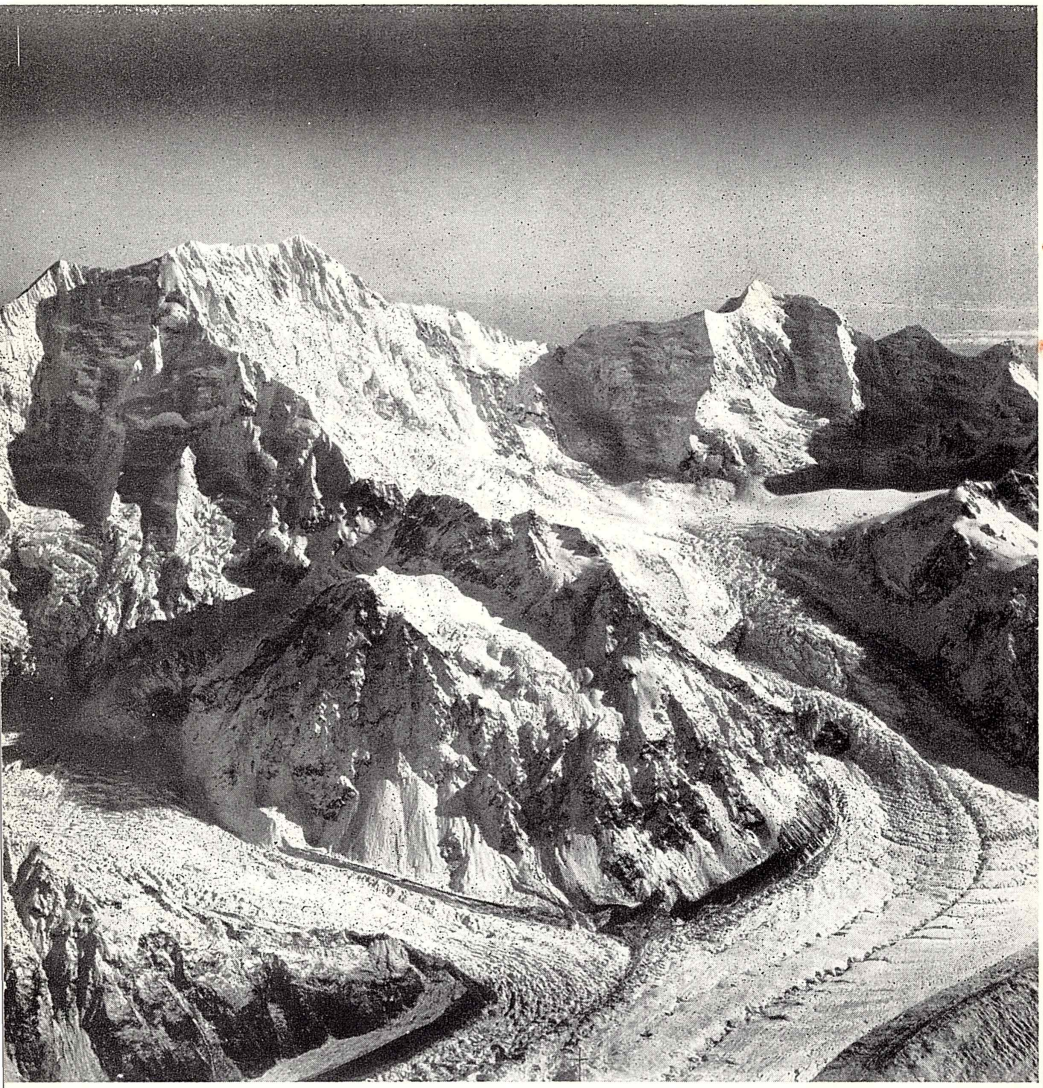
handsome plant, the mountain daisy, *Celmisia coriacea,* with its stiff silvery leaves and yellow centred white daisy flowers. Tucked away in crevices and corners are all the tiny flowers, ourisias, eyebrights, harebells, helichrysums, as well as the tightly matted creeping plants, some silver, some bronze and many studded with brilliant berries in the late summer. In this large and perfect rock garden, ferns, feathery tutu, and grasses thrive and shelter the smaller herbs and their delicate flowers.

It is not far from the Sefton Stream to the ice face of the Hooker Glacier. The track is along snow tussock flats where mountain buttercups and celmisias abound. Euphrasias, ourisias, *Pratia* and *Parahebe* are all underfoot. The moraines at the Hooker Glacier are being colonised by cardamines, willowherbs, woodrushes, a small tufted plant with sharp leaves, *Colobanthus acicularis,* pohuehue and forget-me-nots. Scabweeds spread across the rubble with all those plants that can be seen migrating on to the Mueller moraines.

These walks have brought you close to the mountains, to the glaciers, and moraines, through streams and damp places, and through many communities of plants. And in summer here you have seen the blooms of the noble mountain buttercup and of the finest daisy in the world.

The glory of the Park: Great Mountain Buttercup at the height of summer

Photo H. D. Ashurst



The Roof of New Zealand: The three peaks of Cook (*left*) and Silberhorn, Tasman, Lendenfeld and Haast (*right*). Beneath these peaks is the Grand Plateau. The Hochstetter Ice Fall descends to join the Tasman Glacier. Ball Hut and Glacier are on the bottom left.

Photo N.Z. Aerial Mapping Ltd.

THE MOUNTAINS

Only a Hill: but all of life to me
Up there, between the sunset and the sea.

Geoffrey Winthrop Young

The greatest attraction the Park has to offer is unquestionably its alpine scenery.

Almost all the 10,000 ft peaks in New Zealand are to be found within the Park. Although officially listed as seventeen in number, there are quite a few minor eminences over 10,000 ft along the Main Divide which have in recent years been climbed and named.

The Park also contains five of New Zealand's largest glaciers, and more than 140 peaks over 7,000 ft in height.

It would not be possible here to list or describe all the peaks. The keen mountaineer and visitor seeking more detailed information will find much of interest in the journals of the New Zealand Alpine Club and the Canterbury Mountaineering Club, while the guide book of Mrs M. Davidson and L. R. Hewitt will prove a mine of information. (*The Southern Alps Part II, Mt. Cook Alpine Regions.*)

The chief interest to the tourist and holiday maker will be the more spectacular of the high peaks. Mt. Cook was named by Capt. Stokes of the survey ship *H.M.S. Acheron,* in 1851, and its height computed at between 12,000 and 13,000 ft.

Public interest was first centred on the area in general and Mt. Cook in particular with the arrival in 1882 of an English climber, Rev. W. S. Green, and the Swiss guides, Emil Boss and Ulrich Kaufmann. Green and his party, after Herculean struggles with alpine scrub and Tasman moraine, succeeded not only in fossicking out a feasible route to the summit but came within an ace of attaining their goal. In view of the fact that they spent a night on the rocks just below the summit, it is a great pity that they did not press on the extra half-hour or so needed for victory. After Green's attempt the race was fairly on and a few enterprising colonials were determined that a New Zealand party would be first on top. Early difficulties were eased with the opening of the first Hermitage, and with the inauguration of a regular coach service in 1887. These years saw men like George Mannering,

Marmaduke Dixon, Kenneth Ross, P. H. Johnson, Tom Fyfe, George Graham, von Lendenfeldt, C. D. Fox, A. P. Harper, C. H. Inglis and J. Annan all attempting Cook and all gaining experience the hard way. In various combinations these men returned again and again to the attack, Mannering and Dixon being the most persistent of them. On one occasion these two returned to civilisation by canoeing from The Hermitage to the Waitaki mouth. All these attempts on Mt. Cook were made by Green's route, i.e., the Linda Glacier (named by Green after his wife).

In late 1894 news arrived that E. A. Fitzgerald, an English climber of some renown, was coming out with the Swiss guide Zurbriggen to attempt Mt. Cook and other peaks. The heat was now really on and a terrific spurt of activity occurred in November and December of that year. Mannering, Dixon, Fyfe, Graham and Kenneth Ross all made valiant attempts, some of which almost succeeded despite atrocious weather. Finally, on Christmas Day 1894, Fyfe, Graham and young Jack Clarke succeeded, having approached the mountain by an altogether new route in the Upper Hooker. This brilliant ascent by a difficult route was not repeated for 61 years when four no less enterprising mountaineers, D. G. Herron, G. J. McCallum, R. Tornquist and H. P. Barcham did the same climb. It was the 100th ascent of Mt. Cook.

Fitzgerald was so disappointed that he made no attempt on Mt. Cook, though his guide Zurbriggen, with Jack Adamson, manager of The Hermitage, accompanying him some of the way, made the second ascent and first solo ascent by a ridge just south of the Linda Glacier. This ridge is now known as Zurbriggen Ridge. One by one the other main ridges fell, Earle's Ridge to L. M. Earle, an English climber, Jack Clarke, guides Peter and Alex. Graham in 1909, the low peak in 1906 to H. Sillem, J. Clarke and Peter Graham, the east ridge to L. V. Bryant and C. L. Mahan in 1938, and finally the south ridge in 1948 to Sir Edmund Hillary and Miss Ruth Adams with guides Harry Ayres and M. Sullivan.

The first traverse of the mountain was that of the high peak in 1906 by S. Turner, Malcolm Ross, Tom Fyfe and P. Graham, who climbed Zurbriggen Ridge and descended the north ridge and Fyfe's couloir. The first Grand Traverse, over the three peaks, was made by Miss Freda Du Faur with guides Peter Graham and Darby Thomson from the Hooker Glacier to the Tasman in 1913. They descended by way of the Linda. The first traverse along

the summit ridge from the Tasman to the Hooker was made in 1940 by H. J. Stevenson and R. D. Dick, who climbed by way of Zurbriggen Ridge, which had not been used for 35 years, and descended by the snow route on the northern face of the low peak. The only face climb was made in 1956 by D. G. Herron and the party mentioned above; starting from the Empress Hut they made a climb up the western face to the middle peak.

In 1953, Mrs M. Davidson, Miss Sheila McMurray and Miss Doreen Pickens made the only all-woman ascent.

Guide Harry Ayres (now Chief Park Ranger) holds the distinction of being the only man who has climbed Cook by all the main routes. Andrew Anderson is the first man to climb all of the 10,000 ft peaks, though H. E. L. Porter missed that distinction in 1936 when he turned back a few feet from the summit of Dampier rather than risk a night out on a very exposed mountain—a most difficult decision to make, but one which won him the admiration of all true mountaineers.

It is interesting to note in this age of artificial aids to mountaineering that on the first 27 ascents of Mt. Cook (over the period 1894-1925), Zurbriggen was the only man to wear crampons.

As the traveller rounds the base of Mt. Sebastopol the eyes are impressed by the ice-encrusted precipices of Mt. Sefton towering a full 7,000 ft to the summit at 10,359 ft. Named by the Maoris Munga Atua—mountain of the Gods—it is a moot point whether Mt. Sefton or Mt. Cook takes pride of place when viewed from The Hermitage. Mt. Sefton was first climbed by E. A. Fitzgerald and Zurbriggen in 1894. Their route lay from a bivouac above the Te Waewae Glacier across the Huddleston Glacier to Tuckett Col, thence up the N.E. Ridge. The whole route is visible from The Hermitage. This route has been climbed on only a few occasions, very unstable rock on the final ridge making it a rather dangerous climb.

Sefton has been climbed many times from the west, for this is a relatively easy, though circuitous, route involving a crossing of Copland Pass and a descent for a considerable distance down the Copland River. The first ascent of the south ridge was made from the Mueller Glacier in 1914 by Otto Frind and Conrad Kain on a route not since repeated. Probably the most exacting climb was done by three Christchurch climbers, G. Harrow, B. Barley and F. Edwards, in 1953. The final part of their climb was more or less straight up the east face of the mountain.

Swinging further north we come to the Footstool, an excellent training climb and viewpoint, as is Mt. Sealy across the Mueller valley. A mile or two further north at a low point in the range the Copland Pass leads over into the Copland River and so down to the West Coast. It was first crossed in 1896 by A. P. Harper, and makes a popular trans-alpine crossing.

Mt. La Perouse, 10,101 ft, a striking peak as viewed from The Hermitage, is a lovely ice climb; it was first ascended by Dr Teichelman, Canon Newton, R. S. Low and Guide Alex. Graham from the west. The first ascent from the east was not made till 1921, when H. C. Chambers and Guide Peter Graham used what is now the usual route, i.e., from near Harper saddle over Sturdee, Jellicoe and Lowe. In 1958, G. Hassell, R. Tornquist, A. R. Page and R. Seddon made a direct route up the east face.

St. David's Dome, or Mt. Hicks, is the 10,443 ft mountain east of Harper saddle and apparently just west of Mt. Cook. In fact, it is separated from Mt. Cook by our third highest mountain, Dampier, 11,287 ft, which is invisible from The Hermitage. St. David's Dome was first ascended in 1906 by Dr. Teichelman's party. It is a fairly difficult rock climb with several variations on its west and north-west faces.

One must visit the Tasman Valley to get adequate views of the other 10,000 ft peaks. From Unwin Hut the view up the Tasman is comprehensive, though a little remote. On the left, and past the shoulder of Mt. Cook, one sees the square top of Mt. Haidinger, then round to Graham saddle and Mt. de la Beche, then the Minarets and Elie de Beaumont, and at the head of the valley Lendenfeld saddle and Hochstetter Dome. In the centre of the view we have the Malte Brun Range, with Mts. Malte Brun and Chudleigh the dominant features. On the right is the Murchison Valley and Glacier and the Liebig Range.

A trip to the Ball Hut and an excursion as far as the spectacular and famous Hochstetter Icefall brings most of the Tasman valley peaks into better perspective. Recently two Australian visitors keen on gaining mountaineering experience spent a day and night attempting to climb this frozen cataract of ice. When asked why they ventured into such an unhealthy spot they explained that they had only read one book on mountaineering and in it Sir Edmund Hillary had climbed an ice fall in the approach to Mt. Everest, so they presumed that was the usual thing to do! The north side of the ice fall is contained by the Haast ridge,

high up on which is perched the King Memorial Hut; 1,000 ft higher, Glacier Dome offers another superlative viewpoint.

Past the bulk of Mt. Cook one catches glimpses of Mt. Dampier, and then Mt. Tasman, 11,475 ft, New Zealand's finest ice climb. To quote H. E. L. Porter, "of all the mountains I have ever seen, in reality or even in dreams, Tasman is the most faultlessly beautiful, with the one possible exception of the Weisshorn".

The climb of Tasman is usually made by first traversing the Silberhorn, just to the south, and this route was taken on the first ascent by Fitzgerald, Zurbriggen and Clarke in 1894. It is also climbed by the steep icy ridge leading on to the north shoulder (Syme Ridge), a route pioneered by Rodney Syme and L. V. Bryant in 1931. All climbs made from the west have been over the north shoulder, usually traversing Lendenfeld, the snow peak to the north, on the way. J. N. Hamilton and W. K. A. Berry made the only ascent, in 1955, of the difficult Buttress ridge on the west. The first east-west traverse using the west ridge was made in 1940 by H. J. Stevenson and R. D. Dick, and in 1950 J. N. Hamilton, L. Cleveland and J. Lange descended the ridge and made the first traverse of Torres, a 10,376 ft outlier on this Westland ridge.

Mt. Haast, 10,295 ft, named after Sir Julius von Haast, was first climbed by Dr Teichelman's party. Its western ridges and faces offer good rock climbing and were first climbed by Guide Harry Ayres, G. Harrow and A. C. Rattray in 1951. The Dixon-Haast traverse, i.e., the east ridge, was done in 1953 by B. S. Gillies and Ayres. Pioneer Pass, just north of Mt. Haast, offers a mountaineer's access to the West Coast and to Pioneer Hut on a rock rib surrounded by the Fox Glacier.

Mt. Haidinger, 10,059 ft, a beautiful peak by any standards, has the whole of its eastern slopes encrusted with a fantastic jumble of broken ice. It was first climbed by Fitzgerald with Zurbriggen and Jack Clarke, a seventeen-year-old enthusiast.

A most imposing gendarme-studded ridge joins Haidinger to Douglas, and it was not till 1954 that it was traversed by B. S. Gillies and Guide Harry Ayres.

Graham saddle, at the head of the Rudolph Glacier, and the lowest part of the Divide as seen from the Ball Hut, is one of the usual alpine passes for the more active tourist to the West Coast. Users must, however, be competent climbers. Mt. de la Beche, the sharp rock peak to the right of Graham saddle, has a hut at the base of its leading ridge at the junction of the Rudolph and Tasman

Glaciers. There is also a very fine rock bivvy. It was under this rock that R. S. Low, an English climber, sheltered after sustaining an accident on a solo descent of Graham saddle. This epic of endurance lasted till ten days later, when he was discovered, still alive, having dragged himself for a considerable distance and been exposed to a heavy storm before reaching the rock. His only sustenance was one day's food.

Mt. de la Beche was named by von Haast after an eminent English geologist. To its north, the symmetrical twin snow cones of the Minarets, 10,058 ft, offer one of the best ski-mountaineering climbs by a variety of routes. They were first climbed by T. C. Fyfe and Malcolm Ross. New Zealand guides are nothing if not enterprising, and legend has it that a provision-stocking party of guides to Malte Brun Hut, being unable to resist the temptation of a climb but lacking the indispensable rope, called into use a length of No. 8 fence wire and climbed the Minarets. Luckily no one fell down a crevasse that day!

At the head of the valley on the western side stands Mt. Elie de Beaumont, 10,200 ft, nobly flanked on the left by Green and Walter—the whole making a most imposing picture. The first ascent was made by H. Sillem, J. Clarke and P. Graham. Mrs M. Davidson, L. R. Hewitt and A. P. Thomson climbed the east ridge from Lendenfeld saddle in 1954, and Sir Edmund Hillary, W. G. Lowe, H. E. Riddiford and E. Cotter climbed the Maximillian ridge (north ridge) in 1951. In 1936 Arthur Carty, with Jack Cox and G. Somerville, climbed from the west, traversing the west peak, and then Elie. This west peak, 10,027 ft, was first attained along the very exposed ice ridge by Colin Wyatt and Guide Mick Bowie.

All the peaks in the Upper Tasman can be climbed from the de la Beche Hut or the Malte Brun Hut. To anyone active enough to do the five hours' walk up the glacier to Malte Brun Hut the effort is most rewarding as the view from the hut across the valley to the Minarets, down to Cook, Tasman and Haidinger and up to Elie de Beaumont, is one of the most inspiring in the Alps.

Behind and above the hut towers Mt. Malte Brun, 10,421 ft, the mecca of rock climbers. The whole of the Malte Brun Range offers excellent rock climbing, and here ironmongery addicts can have a real feast of piton climbing on the lovely red sun-warmed rocks, with routes by the score, with chimneys, cracks and overhangs, and with incomparable views.

Mt. Malte Brun was first climbed by T. C. Fyfe solo, who on the descent made use of a snow couloir. While descending he heard the rattle of rocks falling above him, so, with fine nonchalance, he committed himself to the whims of gravity and beat the stones to the bottom of the couloir. His laconic comment on the climb, "Played a lone hand with Malte and won."

The north ridge from Hamilton was first climbed by B. S. Gillies and Guide Harry Ayres in 1951, the south ridge by C. A. McDonald, J. P. Murphy and Peter Graham in 1909. The first ascent from the East-Murchison glacier was made in 1953 by Gilian Soper, W. B. Jackson, B. Gunn and F. C. Hollows, followed a few days later by H. E. Riddiford, W. B. Beaven, O. Gibbs and C. H. Tyndall-Biscoe.

The Murchison Valley was first explored by G. M. Mannering and A. P. Harper. It has three saddles at its head, the Tasman into the Tasman Glacier, the Whymper into the Whymper Glacier on the West Coast, and the Classen into the Godley Valley. Another route into the Godley lies over Armadillo saddle and down the Rutherford Stream.

The Godley Glacier drains a fine range of peaks, culminating in Mt. D'Archiac, 9,279 ft. This peak is very prominent away in a south-west direction as viewed on a clear day from the main highway between Rakaia and Ashburton. It was first climbed by L. M. Earle, J. R. Dennistoun and J. Clarke in 1909. Mt. Cook on a clear morning is just visible from the bend in the highway at the Dromore turn-off—well south of D'Archiac—it just peeps over the intervening ranges. A better view is had from Timaru and just south of the town.

The Godley early exploration is bound up with the names of E. P. Sealy, W. A. Kennedy, T. A. Fletcher, G. Mannering, J. N. Lipp, A. S. Sutton-Turner and A. J. Scott, to mention but a few.

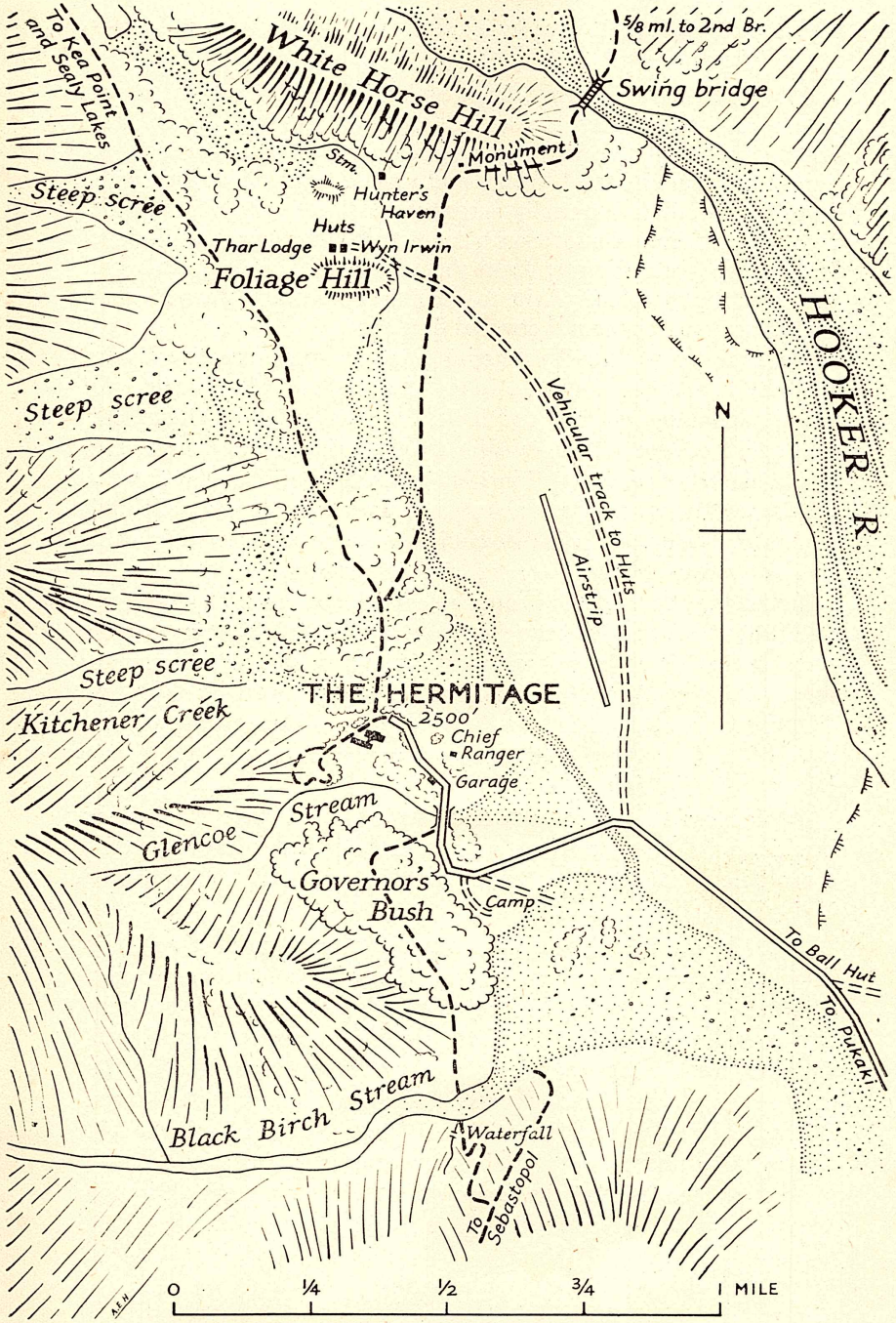
The Murchison Glacier is bounded on the east by the Liebig Range, with Mt. Hutton as its main peak. At its southern end The Nun's Veil and Rotten Tommy are seen to advantage from Unwin Hut. Most of the Liebig peaks were first attempted by Otto Frind and Conrad Kain, followed in later years by Mr and Mrs R. M. Algie. The peaks of the Liebig Range, together with those on the Sealy Range and in the Godley, offer excellent training climbs, ranging from easy to very difficult, for the more exacting world over 10,000 ft.

WALKS NEAR THE HERMITAGE

The walks discussed here all commence from the general Hermitage area and provide excursions, for visitors to the Park, which can be taken without any great degree of effort. They give a fine opportunity of seeing the mountains, glaciers and valleys from a variety of aspects.

While there are tracks to follow, the ground to be covered is rough in places and visitors are advised to wear boots or, at least, stout walking shoes. Rain and storm may cause damage or bring creeks to a high level and visitors, not acquainted with the district, would be wise to make enquiries of the Chief Ranger before setting forth. For those who are interested in the plants to be found in the area, Section III of the Handbook should be read: it will be found that the same walks are mentioned there from a botanical aspect.

The times given for the walks make a liberal allowance for photography, view admiring, re-tying of bootlaces and ordinary undisguised rests; the brisk walker will find that he can cover the ground, should he so wish, in much less time than that stated. As the extent of signposting, track marking and facilities on the walks will change, no attempt is made here to give details; these may be had from the Chief Ranger.


To Kea Point and Seqly Lakes
White Horse Hill
5/8 ml. to 2nd Br.
Swing bridge
Stm.
Monument
Hunter's Haven Huts
Steep scree
Thar Lodge
Wyn Irwin
Foliage Hill
HOOKER R.
N
Steep scree
Vehicular track to Huts
Airstrip
Steep scree
THE HERMITAGE
2500'
Kitchener Creek
Chief Ranger
Garage
Stream
Glencoe
Governors Bush
Camp
To Ball Hut
To Pukaki
Black Birch Stream
Waterfall
To Sebastopol
0
1/4
1/2
3/4
1 MILE

1. Hooker Valley: Lower Swing Bridge—Upper Swing Bridge—Sefton Stream

The track starts from the front of The Hermitage, on the north side, and immediately crosses the boulder covered fan of the Kitchener Stream, flowing from high on the Sealy Range. Once across this fan the track forks, and one should follow the right-hand fork leading diagonally across the Hooker valley flats to the north-eastern end of a low scrub covered mound, known as Foliage Hill, which rises abruptly from the valley floor. Passing this hill the track bears further right to an area of broken ground rising slightly to small matagouri covered flats.

Between the Foliage Hill moraine and the more massive White Horse Hill, another moraine a little further up the valley, is the area where mountain club huts are built; close under White Horse Hill may still be seen a few remains of the original Hermitage, the site having been abandoned in 1913 when the building was gravely threatened by floods. On a warm summer's day this is a delightful area and a pleasant half-day could be spent here searching the hills for mountain plants or relaxing in the sun.

Following the track as it now enters the area of broken ground and heads towards the steep slopes of Mt. Wakefield, there can be seen on the left a sharp stone pyramid against the sky, the monument to Sydney King (Alpine Club, London) and Guides Darby Thompson and J. Richmond who were swept away by an avalanche in 1914 when returning from an ascent of Mt. Cook by way of the Linda Glacier.

After crossing several small flats, walled by low lines of morainic boulders, the Hooker River suddenly comes into view some distance below and the track turns sharply downwards to the *Lower Swing Bridge*.

Standing on the bridge and looking up stream, the foreground is filled with the rock-strewn terminal ice of the Mueller Glacier, and the streams flowing from it, flanked on either side by crumbling moraine walls. On the right, through a narrow gap, barely recognisable as the course of a river, comes the Hooker, its volume to be increased by the Mueller Glacier melt waters. Directly above the desolation of the Mueller rises majestically Mt. Sefton, with, to the right, a sharpish peak, the Footstool.

Leaving the bridge, the track winds by easy grades through mounds and minor walls of old moraine, then settles to a long

trough between two low walls of lateral moraine dumped when glaciers were far greater than they are today; rises momentarily to the crest of the left-hand wall to give a further view of the Mueller, then down and up the right-hand side through an area of alpine plants. Continuing, the track turns abruptly at the top of a steep shingle slope above the Hooker river as it flows from the right round the rock bluffs of Mt. Wakefield.

From here can be seen the way ahead, following rock ledges across the face of the bluffs and working downwards to the *Upper Swing Bridge*. The less agile may be daunted by this sight, but the track remains reasonably broad and a hand-rail offers assistance where needed. It is worth proceeding for the views that lie beyond.

Having crossed the bridge and circled the vast rock that supports it on the far side, one finds the track again, at first leading to the left, but then swinging round a low mound to continue northwards. Almost immediately the low and middle peaks of Mt. Cook appear above the shoulder of Wakefield, and shortly the mountain's full mass, with St. David's Dome at its side, fills the head of the valley.

It is no great distance now, by easy grades and across pleasant flats, to the *Sefton Stream* and the old luncheon hut on its northern bank. Across the stream, set on an iron drum, is a plane table with a direction pointer which may be used to identify the surrounding peaks and passes.

Here one is in the very heart of the mountains and there can be no more magnificent spot in the Park, completely remote and unspoilt, for the visitor who is prepared to spend a few hours walking over easy ground. It is a walk which can be accomplished in half a day by pressing forward, but it well merits carrying lunch and camera and spending ample time.

The track continues up the valley to the Hooker Hut and beyond. The Hooker Glacier is concealed by mounds of ancient terminal moraine stretching across the valley floor, but, while it is not far to the terminal face, it is a considerable distance to the white ice.

Times: Hermitage to Lower Swing Bridge—1 hour; to Upper Swing Bridge—1½ hours; to Sefton Stream—2½ hours.

2. Kea Point—Sealy Lakes

This walk commences by the same track as the Hooker valley walk, but after crossing the Kitchener Stream, the left-hand fork should be taken where the track divides. The way leads along the

edge of, and a little above, the valley flats and crosses a series of shingle fans spreading further and further out on to the valley floor from the Sealy Range. Foliage Hill is passed on the right and then the broad flank of the greater White Horse Hill. This far the track is broad and for the most part open, presenting no difficulty, except possibly across the shingle fans where, after spring storms, it may be temporarily lost. Care should be taken to see that, on leaving the far side of a fan, the track is found again. Once the last broad open shingle fan is passed, the track soon narrows and winds through dense sub-alpine scrub. The rate of ascent increases, but the grade is easy and only on looking back at the end of the walk is one fully conscious of the height that has been gained. It is unwise to forsake the track for apparently promising leads through the scrub, for one soon finds that a cul-de-sac is reached, with no alternative but to withdraw.

The track is now following a trough, between the slopes of the Sealy Range and a low, broken moraine wall on the right, and continues in this manner until Kea Point is reached. Some distance short of this, however, a signpost marks the turn-off to *Sealy Lakes and the Mueller Hut.* These lakes are really small mountain tarns lying in hollows about half-way up the slopes of the Sealy Range, reached by a short, stiff scramble, first up a boulder-strewn gut, and then by way of minor ridges to a terrace, broader than one would imagine from below. The alpine flowers in summer are magnificent and the view from the lakes is similar to that from Kea Point, but enhanced by the better perspective that increased height in the mountains will give. Two tarns are ideal for swimming in, and in summer a delightful spell can be enjoyed from the warmth of the climb.

The Mueller Hut lies over the crest of the range above, but unless one is experienced in mountain travel, it would be unwise to continue towards it. The Chief Ranger should certainly be consulted before any attempt to do so is made.

Most will prefer to leave for another day the scramble up to Sealy Lakes and to walk on to *Kea Point.* The track continues as before and then, after rising a little more steeply, ends abruptly at the top of a steep, unstable slope plunging to the shrunken remains of the Mueller Glacier below. It is unwise to approach the edge too closely as the rubble of the wall below is constantly falling and leaving undermined the root-bound surface at the top. Looking across the valley, one can clearly see a similar wall where the rubble falls, no longer supported by the glacier as it was in

the not far distant past, and imagine how the scene appeared to visitors forty or fifty years ago when the glacier amply filled the full breadth of the valley. It is easy to understand why mountaineers in search of climbing in the Upper Mueller prefer now to the cross Sealy Range rather than follow the edge of the glacier.

For disappointment at the sight of the glacier, there is ample compensation in the ice and rock walls of Mt. Sefton towering above and the Divide peaks in either direction. Looking straight at the summit, one sees a steep rock ridge falling to the right to a slight notch in the Divide. The latter is Tuckett Col, and the original and classic, but difficult, route to the summit is from this col by way of the ridge.

Turning right and looking up the Hooker valley, one finds that the high peak of Mt. Cook is visible. Kea Point is probably the only place readily reached on foot from The Hermitage from which it can be seen. It rises sharply to the left of the low peak, and appears detached from it, the long summit ridge and the middle peak being obscured.

A plane-table, as at the Sefton Stream, has been made for Kea Point, but its use there may have to be discontinued as the constant falling away of the moraine wall prevents any permanent site being found.

This walk is better taken in the morning while the sun still strikes the eastern slopes.

Times: Hermitage to Kea Point—1½ hours; to Sealy Lakes—2½ hours.

3. Red Lake—Sebastopol

Leave The Hermitage by the road, follow down over the Glencoe Stream and some fifty yards beyond to a signpost on the right; then take the track leading through the camping ground to the shingle fan of Black Birch Stream.

Looking across the fan while descending towards it, one can clearly pick out the start of the track directly opposite on the lowest slopes of Sebastopol. The shingle fan is easy to cross and the stream itself can often be forded dry-shod, but it may be wise to enquire as to its state before commencing the walk.

The track zig-zags up and across the face of the hill, gaining height at a fair pace but maintaining a reasonable grade. Normally there should be no difficulty in following it, though slips may cause breaks at times. Further across the face may be seen another

track rising in a similar fashion, but this is well broken in places and now little used.

After climbing for some time, the track surmounts a final crest, the rim of a delightful sheltered basin lying directly below the rock cliffs and shingle slides of Sebastopol. Here lies the small mountain tarn known as *Red Lake*. On the crest, to the left of the track, as one ascends, stands a plane table, and from here one views the Mt. Cook Range and all the peaks, cols and passes of the Divide from St. David's Dome to Mt. Sefton. Unlike the Sefton Stream, where one is right under and among the mountains, this spot is sufficiently remote for one to stand back and appreciate fully not only the major peaks, but all the minor tops and their true relationship to each other. Mountains are seen best not from the highest points, nor from the valley floor, but from some eminence between, and this is attained to some degree by climbing to Red Lake.

While Red Lake is normally regarded as the end of the walk, behind the basin in which it lies a gully rises to a ridge of Sebastopol. For those who still have energy remaining, it is well worth while to scramble up to the dip in the ridge above. To the right the ridge rises to Mt. Sebastopol itself, a short scramble on rock, but, by turning left and walking a few chains out on to the level tussock tops, one finds the views extended immeasurably. All the peaks of the Hooker are visible, as before, but seen to better advantage with the extra gain in height, and, further right, the broad river flats of the Tasman valley lie before one and, beyond, the Murchison Glacier, flowing between the Malte Brun and Liebig Ranges. The black ice of the terminal face of the Tasman can be seen, but the main stretch of the glacier is hidden by Mt. Wakefield.

The walk to Red Lake, like that to the Sefton Stream, justifies a full day. It is well to start shortly after breakfast, before the sun beats too strongly on the lower slopes; its warmth is more likely to be enjoyed when the ascent is over.

Times: Hermitage to Red Lake—2 hours (to ridge above, further ¾ hour).

4. Governor's Bush

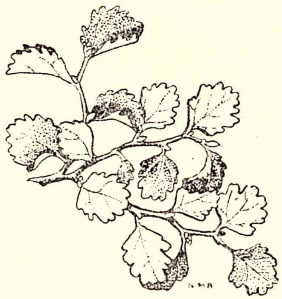
This is a gentle little walk through the shade of beech forest, very suitable for breaking the somnolence of a summer afternoon.

Leave The Hermitage by the road and walk down until the bridge over the Glencoe Stream is crossed. Some fifty yards be-

yond, the track leads away to the right at a signpost and quickly enters the last stand of beech forest in the area. The track is broad and well formed and climbs very gradually, working round the curve of the hill and rising to an area of thick, well grown sub-alpine scrub. The highest point is reached on the level top of a spur opposite the face of Sebastopol and overlooking the gorge of the Black Birch Stream.

Many may feel that this is far enough, and that little will be gained by proceeding further. The track now descends, more steeply than it rises on the ascent, leading down to the stream below. By continuing, one can complete the walk by following down Black Birch Stream, along the side of the shingle fan that develops below the gorge and then back through the camping ground to the road. It is usually necessary to cross the stream twice, however, and this will not always be possible.

Times: Hermitage to highest point on track—½ hour; to Black Birch Stream—¾ hour.



Silver Beech

BIRDS AND ANIMALS

A casual visitor could mistakenly think that the Park contained very little bird and animal life. However, anyone who is willing to be still, to look with care and to listen, will find a rewarding diversity of bird life. While pride of place quite rightfully belongs to the kea, this noisy, inquisitive and colourful mountain parrot is far from the only bird present. The following notes describe the main features of the principal native birds found in the Park. For general convenience these are divided into three groups: those of the alpine grasslands and rocky tops, those of the forests, and those of the river beds. But a quiet and patient observer can see most of the birds mentioned (as well as the more common introduced birds) on the walks described in the previous section.

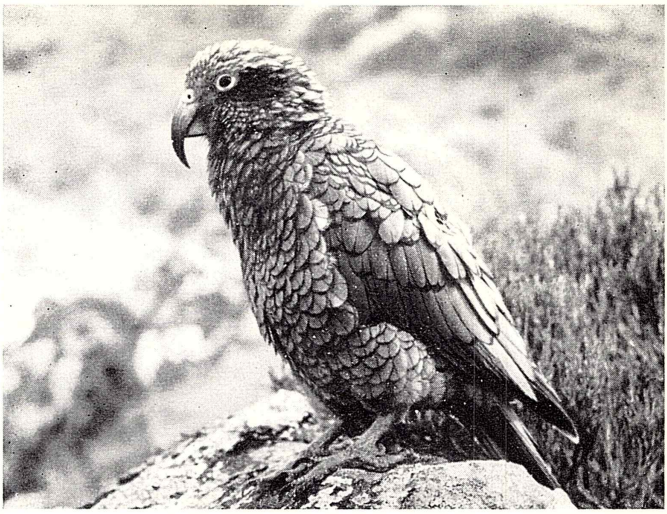
Birds of the Alpine Tussock and Rocky Tops

Kea

This alpine parrot, although not the most numerous, is the best known bird in the Park. Occasionally flocks of twenty or more can be seen in the vicinity of the huts or The Hermitage. In appearance it is generally a dull olive green in colour with scarlet feathers under the wings and the beak is noticeably less curved than that of other parrots. The kea's name arises from his repeated raucous cry: kea, kea.

Confined to the South Island, its habitat is the alpine scrub region and the tussock land above, and its nesting place in small natural tunnels between rocks, often in high places difficult of access. But the kea is a frequent visitor to all parts of the Park.

Its diet is varied (as many climbers have found to their cost on returning to camp), including insects and worms, and also the fruit, young shoots and roots of alpine plants. Unfortunately certain individual keas have developed a habit of attacking sheep by pecking through to the kidney fat and as a result of these depredations on high country flocks they are not protected, as are most native birds. In some areas a bounty is paid for their beaks. Absolute protection is, however, afforded them within the Park. Keas are naturally unafraid of man and are of a very curious and playfully destructive turn of mind. Most people who have lived among the Southern Alps have funds of stories to relate of



Kea

Photo National Publicity Studios

The ski-tow on the Ball Glacier: the Tasman Glacier behind, Mts. de la Beche and The Minarets (*left*), Elie de Beaumont and Hochstetter Dome (*centre*), and Malte Brun (*right*).

Photo H. D. Ashurst

A ski plane on the Mueller Glacier, Mt. Bannie behind

Photo H. D. Ashurst

damage done to personal belongings by their powerful beaks, which can function very efficiently as scissors.

Rock Wren

The appearance of this species is somewhat similar to that of a rifleman, but is larger. Its back is olive brown and the short tail is dull olive. The breast is pale brown, yellowish on the sides. The rocky scrub areas above the bush line are the favourite habitat of the rock wren. The rock wren bobs its head up and down in a characteristic way when settled and is an insect eater.

N.Z. Falcon or Bush Hawk—Karewarewa-tara

This fierce and fearless hawk is to be encountered in small numbers in the Park, round the bush in alpine scrub and on tussock land. With a dark brown back and light brown breast streaked with dark, this handsome bird is as aggressive as it looks and will attack anything, including humans, in the vicinity of its nest. Its high speed dive passing within a foot or so of one's head can be very frightening, as indeed it is intended to be. The female is noticeably larger than the male. The bush hawk's food consists largely of birds, varying in size from ducks downwards, but also includes rats, mice and lizards.

Pipit—Pihoihoi

A small bird similar in appearance to the skylark but which keeps fairly close to the ground. It is abundant in the Park on tussock land up to 4,500 ft and also on the shingle riverbeds. It has a speckled brown back and head with speckled white throat and breast. Its diet consists of insects and their larvae, spiders and worms.

Birds of the Native Forest

Native Pigeon—Kereru

This beautiful bird still exists in small numbers in Governor's Bush behind The Hermitage. With its white breast, crimson bill and golden green head and back showing copper reflections, it makes a pretty sight perching in the forest feeding on leaves and berries. It has no great fear of man and may be approached quite closely. It was once a very abundant species in New Zealand. Destruction of the bush, on which it depends for food, predatory animals and the high esteem in which it was once held as a table

delicacy have all contributed to its reduction to relatively small numbers.

Yellow-Breasted Tomtit—Miromiro

This is a friendly little bird, found in Governor's Bush and further afield in the heavier scrub. It can easily be recognised by its small size, glossy black back, yellow breast and a white bar across the top of its wings. It seldom seems to be still, spending a lot of its time fluttering from branch to branch searching for insects which form the major part of its diet.

South Island Fantail—Tiwakawaka

The black and pied fantails, found in all parts of the South Island, are quite common in Governor's Bush and in scrub covered areas in the Park. These pretty little birds are quite unmistakable as they flutter through various evolutions on the wing, their long tails spread fanwise, and all the time twittering pleasantly. They are quite fearless and will enter a tent or house when in pursuit of food, which consists entirely of insects caught on the wing. Their beaks can be heard snapping as they catch the small flies, mosquitoes, etc.

Rifleman—Titipounamu, Piripiri

In contrast to the fantail, this very small bird at first sight appears to be tailless, although it actually possesses a small black one with whitish tip. The male bird's upper surface is green and the rump yellow; the female is streaked above. It lives in the bush and can be seen climbing up and down the trunks of trees searching for insects in the bark. On trees it moves with a characteristic quick jerky motion, and when standing it continually bobs its head up and down.

Bellbird—Makomako

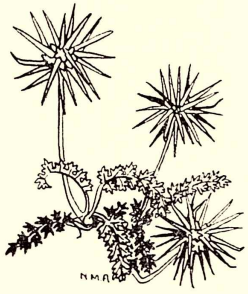
Amongst New Zealand native song birds this is the most melodious, its note resembling, as its name suggests, that of a small silver bell. Bellbirds are occasional visitors to Governor's Bush. The general colour is olive green, tending to yellow olive on the abdomen and the sides of the body. The head has a deep purple gloss. The female has a duller plumage than her mate. Insects, nectar and fruit constitute the bellbird's food, its preference being for nectar, but in the winter months of necessity it seeks out fruits which happen to be in season.

Grey Warbler—Rironiro

This species is abundant, found rather in scrub or on the margin of forest than in the bush interior. In colour this small bird is brown-grey and the tail feathers have a white spot near the tip. The species receives the special attention of the Shining Cuckoo, which destroys the later broods in many nests. Insect life provides its main source of food.

Morepork—Ruru

This is the native owl and is more likely to be heard than seen, as it hides during the day time. The characteristic cry of the bird from which it gets its name is "morepork", this cry being repeated throughout the night. It is mainly an insect eater, moths, beetles and wetas being favourite foods. If rats and mice are available they will be eaten also, each one being carefully skinned before being devoured. Part of their diet consists of small birds.



Pink Bidibidi

BIRDS OF THE RIVERBED

Black Backed Gull—Karoro

This common seagull has, as its name says, a black back and upper wing surface. The remainder of the plumage is white and its bill yellow with a red spot. It can frequently be seen in the Tasman riverbed, but like the kea roams widely: alpinists on top of Mt. Cook have seen it soar effortlessly past.

It eats any kind of animal matter, fresh or rotten, and is an excellent scavenger. Unfortunately, like the kea, it has acquired

the habit on occasions of killing weak lambs and old sheep heavy in wool. Unlike the kea, however, it kills by picking out the eyes.

South Island Oyster Catcher

This bird resorts to riverbeds and can be seen on the Tasman river flats in spring and summer, the breeding season. September and October is the usual nesting time, the birds afterwards migrating to the coast, where they winter. In appearance the Oyster Catcher has a glossy black head, throat and back, while the undersurface is white. It has a straight, reddish-orange beak about three to four inches long and the feet are pink. For food it relies mainly on small animals, worms and molluscs which it finds on beaches and riverbeds.

Paradise Duck—Putangitangi

These large-size brightly coloured ducks can often be seen on the Tasman river flats. They are usually in pairs, mating for life. Any single ones have lost their mates. The female has a white head, rust coloured front and black back. Her characteristic cry on being disturbed is a loud "Where, Where". The male has a black and blue-green head and a brown and black body. His cry is a very guttural one.

Banded Dotterel—Tuturiwhatu

This is another common bird in the locality, in spring and summer being found mostly on riverbeds. It has a brown back and a white breast across which run two prominent bands, the upper being black and the lower chestnut. The colour scheme blends very harmoniously with the surroundings, especially when the bird is on the nest. Its food is almost entirely insects and crustacea, plus occasional berries. At the end of the summer breeding season, usually in February, the birds migrate to the coast and some go as far as Australia. They return in early spring to recommence breeding.

ANIMALS

There are no animals native to New Zealand and all those found in the Park are the result of deliberate attempts about the turn of this century to provide game animals for sport. This policy is today widely regretted, for rapid increase in animal numbers has caused severe damage both to native plants and soils. At present

much money is being spent in efforts to eradicate animals joyfully acclimatised fifty years ago!

The two principal animals in the Park are thar and chamois. Red deer do occur, in small numbers only, at the head of the Godley River, sometimes in the Murchison River, and also in those rivers above the Glentanner sheep run, just approaching the entrance to the Park. Thar and chamois, on the other hand, are very numerous, being distributed fairly evenly throughout the Park wherever there is alpine scrub or snow tussock. Although liberated at approximately the same time, chamois initially seemed to increase in numbers more rapidly than thar, and were predominant in the Hooker, Tasman and Murchison valleys until the last decade, during which the thar have gained numerical ascendancy.

Chamois have ranged further afield, however, and are now established on most of the alpine and much of the foothill country between Milford Sound and Marlborough. The thar herd has not expanded so rapidly and is confined mainly to alpine country between the Landsborough and Rangitata Rivers. Both animals are pests as well as game and there is an open shooting season on them all the year round, as there is on the deer.

The Himalayan thar is of the goat family, differing in minor characteristics only from true goats. The full-grown male is a little more than three feet in height at the shoulder, has thick black horns curving sharply back and weighs in excess of 200 lbs. The old males have a ruff of grey-black hair round the necks and the pelts are extremely thick. The does are smaller and are a russet brown or grey colour. The animal is a really magnificent climber and if shot at much becomes very wary and difficult to stalk, but an unmolested herd may become relatively tame and quite approachable. They are gregarious, herds of sixty to seventy strong being not infrequent on the east side of the Main Divide.

Originally there were only five thar, and they were liberated in the Mt. Cook district in 1904. They came from England, being a present to the New Zealand Government from the Duke of Bedford, who bred them at Woburn Park. Coming into an environment not dissimilar to that of their native Himalaya, they continued to thrive and today constitute a strong, virile herd.

The chamois is a smaller and much more lightly built animal. Its coat is a fawn colour in the summer months and in winter is a dark grey to black with bright yellow on the side of the face and on the throat. It is an agile and graceful climber and is usually

found in and around the sub-alpine scrub areas, generally a little lower than those haunts preferred by thar. The chamois originally liberated in the Hooker Valley were obtained only with some difficulty. Unsuccessful attempts had been made by the then Department of Tourist and Health Resorts to obtain the animals. However, by chance, the Austrian warship *Panther* visited New Zealand in 1905. The captain and crew were well entertained by the Tourist Department and live specimens of native birds were obtained to be sent to Austrian zoos. In response to the kindness shown, the captain asked the general manager of the Department if there were anything he wanted from Austria. The request was for chamois, and on his return the captain submitted the request personally to the Emperor Franz Joseph, who issued orders for a great chamois drive in which hundreds of soldiers and gamekeepers were engaged. As a result, several hundred chamois were yarded and eight of these were selected to make the trip to New Zealand. In March 1907 all eight reached Wellington in good health and were shortly afterwards set free in the Hooker Valley. They, like thar, have found themselves in a suitable environment and have thriven.

Hares and rabbits also occur, though rabbits are much less numerous latterly as a result of intensive efforts to destroy them. Hares, deer, thar and chamois are, of course, noxious animals: their shooting in any National Park is encouraged. However, a permit must first be obtained from the Chief Ranger. Rabbit destruction is controlled by the Pukaki Rabbit Board. Shooters should remember that it is not permitted to take a dog into the Park.

Thar

SKI-ING

Ski-ing is a demoralising sport: one is either going so fast that one is frightened or so slow that one is ashamed.

Sir Arnold Lunn.

The Park can justly claim to have seen the birth of ski-ing in New Zealand. In 1893, Marmaduke Dixon, Guy Mannering and T. C. Fyfe used blades from a reaper and binder when crossing the Grand Plateau and found them most successful. This example was not actively followed up and nothing more was done until 1909 when Captain Head and Mr L. M. Earle introduced foreign-made skis at Mt. Cook. Unfortunately the First World War prevented the development of the Park as a ski resort.

After the war, Alf Brustad, a Norwegian guide, revived interest in ski-ing and ski climbers began using skis to assist them back from climbs, Mr R. L. Wigley's first and to date the only winter ascent of Mt. Cook being a notable example. In the late 1920's and 1930's ski-ing began to become a popular winter sport at The Hermitage and New Zealand Championships were held on the Ball Glacier. Local skiers, such as H. H. Elworthy, Harry and Sandy Wigley, achieved fame as New Zealand champions and the two Wigleys later represented New Zealand in Australia. An Englishman, Colin Wyatt, drew attention to the ski mountaineering possibilities by his notable climbs with Guide Mick Bowie, and English ski instructors laid firm foundations for many New Zealanders.

The Second World War again called a temporary halt but 1946 saw New Zealand Championships once again being held on the Ball Glacier. At these championships all competitors lived together in the Ball Hut and a great comradeship was thereby built up, especially when there was a heavy snowfall and the road back to The Hermitage was closed. This, however, was the last championship to be held in the Park as with the advent of ski-tows, the championships moved to Queenstown and Ruapehu. A ski-tow was installed on the Ball Glacier shortly afterwards and this is a short fifteen minutes' walk from the hut. It is a delightful place for the moderate skier, especially the beginner. The slope is gradual, so that the feeling of helplessness and terror which often

overcomes the novice is absent. Later another tow was placed below the Ball Hut and while the snow lasts this is a very great boon to the visitor. He can step out of the hut on to his skis and when tired or cold can retire at will to the warmth of the Ball Hut. Unfortunately these ski-ing fields are not steep or extensive enough for the modern high-speed skier nor for the long distance down hill and giant slalom courses that the modern championships now demand.

This is a strange paradox for an area which has greater snowfields than any other comparable area in the world outside the Polar and Himalayan regions, but the problem is one of access. The ski-ing fields at the Ball Hut are incapable of further development for the modern skier who wants transport to the foot of the ski-tows and ski-tows to the top of the runs. The run from the top of the Ball Pass back to the Ball Glacier is a magnificent one but is only available to those who are prepared to climb the whole way. Any thoughts of extensive lifts in this area are quite impracticable without unreal expenditure, and even then a cable-car up the ridge or chair-lifts up to the pass would be very exposed and become dangerous in bad weather and very expensive to maintain. It will not be economic or practicable therefore to develop the ski-ing at the Ball Hut any more than it is at present.

More extensive ski-ing is now available with the development of the ski plane. Mr Harry Wigley, of the Mount Cook Tourist Co. Ltd., first landed on the snowfields of the upper Tasman Glacier in 1955 in a plane fitted with skis of his own design and make, after taking off from a conventional aerodrome. He has now landed on the upper snowfields of the Tasman, Murchison and Mueller glaciers, as well as on the Sealy and the Grand Plateaus. It is therefore possible for a ski-ing party to leave The Hermitage by air in the morning and be landed at the head of the Tasman Glacier, from where the party can ski fifteen miles back to the Ball Hut in time to catch the normal bus back to The Hermitage in the afternoon. Ski mountaineering has again become more popular as a result; climbers are hesitant to add a pair of skis to their already heavy packs when they have a long climb to their hut, but they can now be landed by plane close to their base and so do away with a lot of the hard work.

Another type of ski-ing, namely, ski touring, has grown in popularity in recent years. Parties travel from the Godley, or even the Rangitata, crossing on to the Tasman Glacier either via the Murchison Glacier or over the Tasman saddle. Another trip is to

the West Coast via Graham saddle. The best time of the year for this type of ski-ing is in the spring before the winter snows have melted. These trips are, of course, only for the experienced and well equipped parties: the uncertainty of the weather and the difficult nature of some of the country requiring all the respect that only long experience can bring.

A proposal has been made by the Tourist Department to provide access to the snow basins on Mt. Wakefield. These basins face The Hermitage across the valley. It is expected that these fields will provide ski-ing of the standard required by the modern skier, and they would be readily accessible to The Hermitage provided the engineering difficulties in constructing an aerial railway can be overcome. New Zealand winter conditions pose many problems which are not met with overseas—as, for example, sudden and severe storms, and heavy icing. If these problems can be overcome then the Wakefield basin ski-ing would attract the more competent skier and help bring the Park into renewed prominence as a ski-ing centre.

An alternative dream is the aerial railway to the Sealy Range. This would start from a point along the Kea Point track and the first stage would be to the Sealy Lakes. The next stage would reach the snow slopes to the west of the Mueller Hut, and from there rope tows and chair-lifts could extend along the range. It would be necessary to have a good shelter hut (almost an hotel) at the top of the railway as the weather can deteriorate rapidly and adequate accommodation for those caught there by a storm would be essential. This scheme would provide as good, if not better, ski-ing than anywhere in New Zealand. In the winter time, the steep slopes from the Mueller Hut to the Sealy Lakes would provide excellent runs and as the snow retreated with the onset of spring and summer, so the skier could move higher and higher up the range. This range does not lead to high mountains, and consequently there are no glaciers with their attendant crevasse dangers, but it is high enough to provide all the year round ski-ing. With both schemes, a summer time journey up the aerial railway would have a great appeal to tourists and holiday makers. If either scheme could be put into operation, the Park would regain its position as one of the leading ski-resorts of New Zealand. The all the year round demand for accommodation which would result would quickly bring an Alpine Village to reality.

MOUNTAIN HUTS

General Notes on Huts

1. By tradition and common consent, high altitude huts are available to any climber, provided that the correct fees are paid. On the other hand, the various club base huts are for the use of club members only, except by special invitation. Bookings for high altitude huts should be made, depending on ownership, with the club concerned or with the Park Board through its Chief Ranger.

2. Fees for Mount Cook National Park Board huts are 12/6 per day at present, and are payable at The Hermitage for Tourist Hotel Corporation guests, or directly to the Chief Ranger.

3. Fees for New Zealand Alpine Club huts are 12/- per day with a reduction for members. Fees are payable directly to the club (or the administering section), or indirectly through the Park Board's Chief Ranger.

4. Fees for Canterbury Mountaineering Club huts are 12/6 per day with a reduction for members. They are payable directly to the club or indirectly through the Park Board's Chief Ranger.

5. Of the huts listed below, only the Hooker, Mueller, and Ball huts and the base huts in the Hermitage vicinity can be reached by parties without previous experience of glacier travel.

6. The travelling times given are for reasonably fit parties in average conditions. They will vary considerably according to the strength of the party, and to weather and snow conditions.

Warning For All Climbers

1. All climbers in the Park are advised that, purely as a safety measure, and whether they intend to use the huts or not, it is essential to inform the Chief Ranger of their climbing plans *before* setting out, and to check out in the "Intentions" log on their return.

2. At present all Park Board huts have a small sealed stock of rations to be used only in an emergency. Other than this, Park Board huts are not stocked with food. Any person who broaches these emergency rations must report his action to a ranger at the earliest opportunity.

HERMITAGE VICINITY

Unwin Hut

The New Zealand Alpine Club base hut. At the foot of Mt. Sebastopol and on the approach road to The Hermitage, two miles short of it. Built 1946, and named in honour of the late Dr W. H. Unwin, a prominent club member from Timaru. Available only to club members. Administered by South Canterbury Section N.Z.A.C. (P.O. Box 368, Timaru).

Youth Hostels Association: Mt. Cook Hostel

On Hermitage Terrace at edge of Governor's Bush and a few chains from the Main Highway. Built 1958. Available to Y.H.A. members only (membership forms may be obtained from the Chief Park Ranger, who is also Warden of the Hostel). Thirty bunks, mattresses, some blankets, stoves and fuel, limited cooking and eating utensils. Owned by the Youth Hostels Association (N.Z.) and administered by South Canterbury Branch (P.O. Box 371, Timaru). Fees 2/6 per person per night.

Wyn Irwin Hut

The Canterbury Mountaineering Club base hut. Between Foliage and White Horse Hills, 1¼ mile by track, two miles by road from The Hermitage. Built 1956 and named in honour of the late Dr Brian Wyn Irwin, an early member of the club who was killed on active service in 1941. Available to club members and guests only.

Thar Lodge

Also between Foliage and White Horse Hills, and just alongside Wyn Irwin Hut. Built in 1956 by South Canterbury Branch of N.Z. Deerstalkers Association. Available to Association members and guests only.

Hunter's Haven

An old Internal Affairs deer-shooter's hut, now under the control of the Park Board. Under White Horse Hill, and on the site of the original Hermitage. Available to private individuals or to club members as an overflow for club huts, in either case by arrangement with the Chief Ranger. Four bunks, mattresses, stoves and fuel, cooking and eating utensils. Fee: 5/- per person per day, with a minimum of 10/-.

Tasman Valley

Ball Hut, 3,600 ft

Above Tasman Glacier at junction of Tasman and Ball Glaciers, twelve miles by road (not suitable for light cars) from The Hermitage. Main ski-ing centre in Park and starting point for excursions into Tasman and Murchison valleys. Served almost daily by Mount Cook Tourist Co. buses. Normally operated as a ski-ing lodge in winter at weekends; in summer is the lunching place for glacier party excursionists. Magnificent views of the eastern faces of Mt. Cook, the Tasman Glacier, peaks of the Malte Brun Range, and the de la Beche-Minarets massif. Sixty bunks, mattresses and blankets, ample cooking facilities. Owned and operated by Tourist Hotel Corporation.

Malte Brun Hut, 5,700 ft

At foot of Mt. Malte Brun on rock and snow tussock flat about 500 ft above Tasman Glacier. Some five to six hours up glacier from Ball Hut. The base hut for climbs on the Malte Brun Range, and on the Main Divide from de la Beche to Aylmer, the climbs most commonly done being Aiguilles Rouges (9,731 ft), Malte Brun (10,421 ft), Elie de Beaumont (10,200 ft) and the Minarets (10,058 ft). Thirty-five bunks, mattresses and blankets, stoves and fuel, cooking and eating utensils. Owned and operated by Park Board.

de la Beche Hut, 4,789 ft

At junction of Rudolf and Tasman Glaciers, some three to four hours up Tasman Glacier from Ball Hut. Situated on moraine wall at foot of de la Beche Ridge. May be used for climbs of Main Divide peaks from Haidinger to Minarets, or peaks on Malte Brun Range, but is most commonly used as the starting or finishing point for crossings of Graham saddle. Eight bunks and blankets, stove and fuel, cooking and eating utensils. Owned by N.Z. Alpine Club, administered by South Canterbury Section (P.O. Box 368, Timaru).

Haast Hut (King Memorial Hut), 6,900 ft

On the Haast Ridge, and above the Hochstetter Icefall. Some six hours from the Ball Hut. Named in memory of Mr S. L. King who with two guides, Thompson and Richmond, was overwhelmed in an avalanche on the Linda Glacier in 1914. The main

high altitude hut for the big Tasman Valley climbs, i.e., Mt. Cook (12,349 ft) (by the Linda, Zurbriggen Ridge and east ridge routes), Mt. Dampier (11,287 ft), Mt. Silberhorn (10,757 ft), and Mt. Tasman (11,475 ft). Mts. Lendenfeld, Haast and Haidinger, all 10,000 footers, may also be climbed from this hut. Twelve bunks, mattresses and blankets, stove and fuel, cooking and eating utensils. Owned and operated by Park Board.

Murchison Valley

Murchison Hut, 6,300 ft

On the N.E. slopes of Mt. Cooper, near the head of and 350 ft above the Murchison Glacier. Built 1952. The approach is either from the Tasman Glacier and over the Tasman saddle, or up the Murchison valley—in either case a two-day trip from Ball Hut, or via the Godley valley and across the Classen or Armadillo saddles. A suitable base for climbs of the Main Divide peaks, Graceful (8,200 ft), Brodrick (8,777 ft) and Mannering (8,704 ft), and of peaks at the head of the Malte Brun and Liebig Ranges. Ten bunks, stoves and fuel, mattresses and blankets, cooking and eating utensils. Owned by N.Z. Alpine Club, administered by Wellington Section (P.O. Box 1628, Wellington).

Onslow (Steffan Memorial) Hut, 3,700 ft

On west side of Murchison valley, on downstream side of the Onslow, just below the terminal face of the Murchison Glacier. Built in 1954 from funds bequeathed by F. S. Steffan, a member of the N.Z. Alpine Club. Transit hut to the Upper Murchison, but also for crossings of Malte Brun Pass and climbs on the Malte Brun Range. A good four hours from Ball Hut. Six bunks, mattresses and blankets, stove and fuel, cooking and eating utensils. Owned by N.Z. Alpine Club and administered by Wellington Section (P.O. Box 1628, Wellington).

Mueller Valley

Mueller Hut, 6,000 ft

On the west of the Sealy Range, above and some three to four hours' travel from The Hermitage. A base for the (generally easy) climbs of the Sealy Range. Previously was used for climbs at the head of the Mueller Glacier, but for this purpose will probably be supplanted by Three Johns Hut on Barron Saddle. Twelve bunks,

mattresses and blankets, stove and fuel, utensils. Owned and operated by Park Board.

Three Johns Hut, 6,700 ft

Few minutes along ridge towards Mt. Darby from Barron Saddle. Cairns mark route from saddle. Some three and a half hours from Mueller Hut. Built 1959 with funds from Australia as a memorial to John Vidulich, John Young and John Hammond, three climbers from that country who disappeared on Mt. Cook in 1955. (Hut to be completed by 1960.) Eight bunks. Built and owned by Canterbury Mountaineering Club (P.O. Box 2415, Christchurch).

Hooker Valley

Hooker Hut, 3,700 ft

On west side of Hooker valley and at foot of Copland Pass, some three hours from The Hermitage. A transit hut for excursions up the Hooker valley (experienced climbers only), or over Copland Pass to the West Coast. Twelve bunks, mattresses and blankets, stove, fuel, utensils. Owned and operated by Park Board.

Gardiner Hut, 5,600 ft

On Noeline (or Pudding) Rock above the Hooker Glacier, some four hours from the Hooker Hut. Five bunks, mattresses and blankets, stove and fuel, utensils. Owned and operated by Park Board.

Empress Hut, 8,300 ft

On the western buttresses of Mt. Cook between the Empress and Sheila Glaciers. Built 1953. Two and a half to three hours from Gardiner Hut. The highest hut in the park. Is replacing Gardiner Hut as a base for climbs of St. David's Dome, la Perouse, and the high and low peaks of Cook. Six bunks, mattresses and blankets, stove, fuel, utensils. Built and owned by Canterbury Mountaineering Club (P.O. Box 2415, Christchurch).

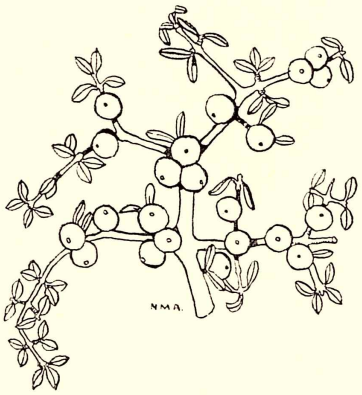
Sefton Bivouac (Footstool Bivouac), 5,600 ft

On a rock rib between the Huddleston and Tewaewae (or Stocking) Glaciers on the face of the Footstool. Four hours from The Hermitage. Will sleep four persons. No amenities. Owned by Park Board.

GODLEY VALLEY

Godley Hut, 4,100 ft

On the east side of the Godley valley just beyond Fitzgerald Stream and near the terminal face of the Godley Glacier. Originally built in 1934, shifted when endangered by erosion and rebuilt 1955. Access is up the east bank of the Godley River from Lilybank Station at the head of Lake Tekapo. The base hut for climbs of Mt. D'Archiac (9,279 ft) and other Godley peaks. Eight bunks, mattresses, sleeping bags, stove and fuel, and utensils. Owned by N.Z. Alpine Club, administered by Canterbury-Westland Section (P.O. Box 1700, Christchurch).



Coprosma parviflora

THE PARK AND THE FUTURE

The unique character of the Mount Cook National Park has long been acknowledged, but it is a sad reflection to realise that not until 1955 was a Park Board formed and serious consideration first given to meeting the aims of the National Parks Act, namely:

> The public shall have freedom of entry and access to the Parks so that they may receive in full measure the inspiration, enjoyment and recreation and other benefits that may be derived from mountains, forests, sounds, lakes and rivers.

Many things have prevented the development of this Park in the past. The main reasons perhaps have been the long, indifferent and lonely road through the Mackenzie Basin and the many creeks, now safely bridged, which closed the road every time there was any considerable rainfall, which was frequently.

The present Board shortly after its constitution realised that the Park should be made available to the public of New Zealand and not just to the guests of The Hermitage. Since 1885 The Hermitage of the day has been the only accommodation available in the area and with the steadily increasing costs and the higher standard of comfort provided all but overnight visitors and sightseers on circular tours can find the expense too great. It has been obvious to the Board that not only is there a need for popular accommodation, but that there are two distinct types of visitors to the Park. One type is the sightseer: he stays at the outside two nights and usually desires the comfort and luxury of The Hermitage. The other type is the holiday-maker who wishes to take his family to the Park for a holiday of, say, a week to ten days: he cannot, of course, contemplate the expense of staying at The Hermitage.

It is this latter type who has been completely neglected and whom the Board now has especially in mind. Development of the Park has therefore been planned to provide for all sections of the community in the accessible areas of the Park. The plan is based on the following principles, namely, that The Hermitage must not be isolated and that building must be centralised. Safety from flooding and the provision of congenial surroundings are also basic features.

The biggest problem is lack of ground which is safe from flood-

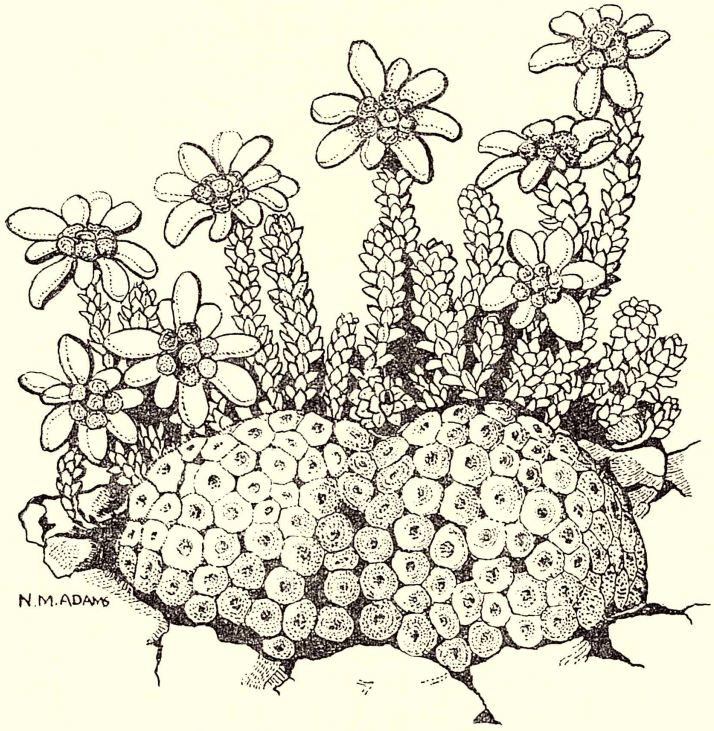
ing. The only two areas are the Hermitage Terrace and the flats between the Hermitage Terrace and the Hooker River under Mt. Wakefield. Both have certain drawbacks. The Terrace is small, and the flats are exposed and do not get much sun in the winter. The Board's plan is to have the Park Headquarters, post office, garage and other services situated on the Hermitage Terrace together with accommodation for the proprietors of such services. Already the basis of a motor camp and a Youth Hostel are established on the margin of the Terrace. This all means that future tourist accommodation must be on the flat. It is part of the Board's policy to plant trees on this flat for shelter, and with judicious planning this area could become an attractive Alpine Village. The White Horse Hill area has been reserved for club huts and already the Canterbury Mountaineering Club and Deerstalkers' Association have built base huts in this locality. This area, although a delightful one, is not entirely free from risk of flooding.

The Board has built houses for its rangers. It is to the Chief Ranger and his staff that the Board looks for the future development and popularity of the Park. A ranger's duties include advising and assisting the public concerning excursions, trips, history, fauna and flora and encouraging the public to take advantage of the area generally. The Board has just (1959) taken over responsibility for all high climbing guiding from the Tourist Hotel Corporation. The guides will in future be part of the corps of rangers. Until very recently The Hermitage controlled every phase of activity in the Park, and this era has ended. The Tourist Hotel Corporation is as anxious as the Board is to see that The Hermitage takes its rightful place in the Park, namely, as a Tourist Hotel only: all outside activities as far as possible are to be under the guidance of the Board.

A picture of the future then is a thriving village on the flat sheltered by judiciously planted trees with boarding houses, motels and hotels providing a range of accommodation, a motor camp on the slopes running down to Black Birch Stream and a village square in front of the existing Mount Cook Motor Company Garage providing all the facilities required, including a modern bus depot from which all tours will leave. The Park Headquarters building will be the excursion centre where holiday-makers may consult rangers and arrange and outfit themselves for the many and varied excursions which the Park can offer.

PROTECTION OF YOUR PARK

One of the main purposes of this, as of all other national parks, is to preserve for all time the native vegetation and bird life. It is important to remember that the native plants and birds were growing and living in the area long before man came to New



Edelweiss and Vegetable sheep

Zealand and it is highly desirable that the trees, other plant life and the birds should remain undisturbed, except by the forces of nature, so that future generations may visualise the original condition of the area.

The law states that it is an offence to take firearms into the Park without permission of the Board. To remove or destroy any

trees, shrubs, ferns or other plants or to interfere with any birds, their nests or eggs is also an offence and these provisions are rigidly enforced throughout the Park.

In a Park of this size it is necessary to rely, in great measure, on the good sense of visitors to preserve the remaining bush, the native flowers and the birds.

How Visitors Can Assist

Fires

When fire danger is high, special temporary notices are erected stating that a closed fire season exists, and at such times no fires may be lit without permission. At other times fires are allowed provided they are made in a specially prepared open place on rocks or earth.

Fires can be started by cigarette ends and other avoidable means, but the greatest danger lies in the careless use of fire itself. Some permanent fireplaces are already built and more will be erected as the need increases. Using large stones, it is easy to make a fireplace set on gravel away from trees and dry grass. A small fireplace requires less fuel and there is less danger of fires getting out of control. Do not leave a fire unattended, and when you depart be sure it is properly extinguished.

Any person who becomes aware of a fire burning unattended in the open air within the Park or within a mile of its boundaries shall immediately do everything reasonably within his power to extinguish the fire, and if he finds that he is unable to extinguish the fire he shall forthwith notify the Rural Fire Officer. This is the law—also it is common sense!

For practical purposes the Rural Fire Officer can be contacted through any of the nearby sheep stations, a Park ranger, the manager of The Hermitage or any Public Works employee.

Any visitor to the Park whose vigilance leads to the suppression of dangerous fires would not be unrewarded.

Flora

On earlier pages of this handbook a brief account is given the vegetation of the Park. None of the native flowers referred to will survive more than an hour or two if picked, therefore all visitors are enjoined to leave them untouched. For those people who have cameras, the pleasure of seeing the flowers in their natural setting can be maintained as long as memory lasts if a

photograph is taken; for those who do not have a camera, souvenir photographs are readily available.

Only for scientific purposes is permission given to take plants, and then only under a ranger's supervision. Horticulturists find it difficult to establish alpine plants in Botanic gardens at lower altitudes; how much more difficult it is for the inexperienced. Unauthorised interference with plant life is the most serious breach of the Park law.

Native Harebell

Fauna

All bird life is protected, and a list of the main native birds is given on pages 40-44. Keas are not protected outside the Park and, for this reason, it is most important that they have a sanctuary. It sometimes happens that the destructive habits of a few of these birds becomes annoying, but this is a small price to pay for the value of seeing them in natural surroundings.

Safety in the Mountains

Mountain Climbing

The Federated Mountain Clubs of New Zealand have published excellent booklets for the serious climber and tramper and these booklets should be studied by all persons who undertake mountaineering. An accident in the mountains involves others in considerable danger, expense, and inconvenience, and no climbing parties should attempt expeditions for which they are not sufficiently experienced and equipped. In recent years all the fatal accidents in the Mt. Cook region have been largely attributed to inexperience and the neglect of some basic rule for safe climbing. At least one member of every party should have experience of

crevassed country and all should be skilled in the use of climbing ropes and ice axes. Suitable clothing is essential. The dangers from sunburn should not be underestimated.

Warning For All Climbers

All climbers in the Park are advised that, as a safety precaution, it is essential to inform the Chief Ranger of their climbing plans *before* setting out, and equally to inform him of their return.

Local Walks and Excursions

There has never been a serious accident on any of the trips listed between pages 32-39. Occasionally visitors making day excursions from The Hermitage area have suffered a bruise or a sprain. If the visitor has joined a conducted party to the Tasman Glacier or elsewhere there will be no danger of serious injury.

Before setting off on any of the longer walks, it is wise to seek information from a Park ranger as to weather prospects, distances and likely difficulties, and to follow any advice received. It is unwise to travel alone in the Park.

The greatest danger is from loose rocks on steep sections of tracks and hillsides and care is necessary in such places. On no account should rocks or boulders be set moving deliberately.

First Aid

In the event of accidents involving serious injury, first aid is important. An injured person should be kept warm and supplied with cool sweet drinks to counter shock while help is obtained.

Gentiana bellidifolia

GUIDING SERVICES

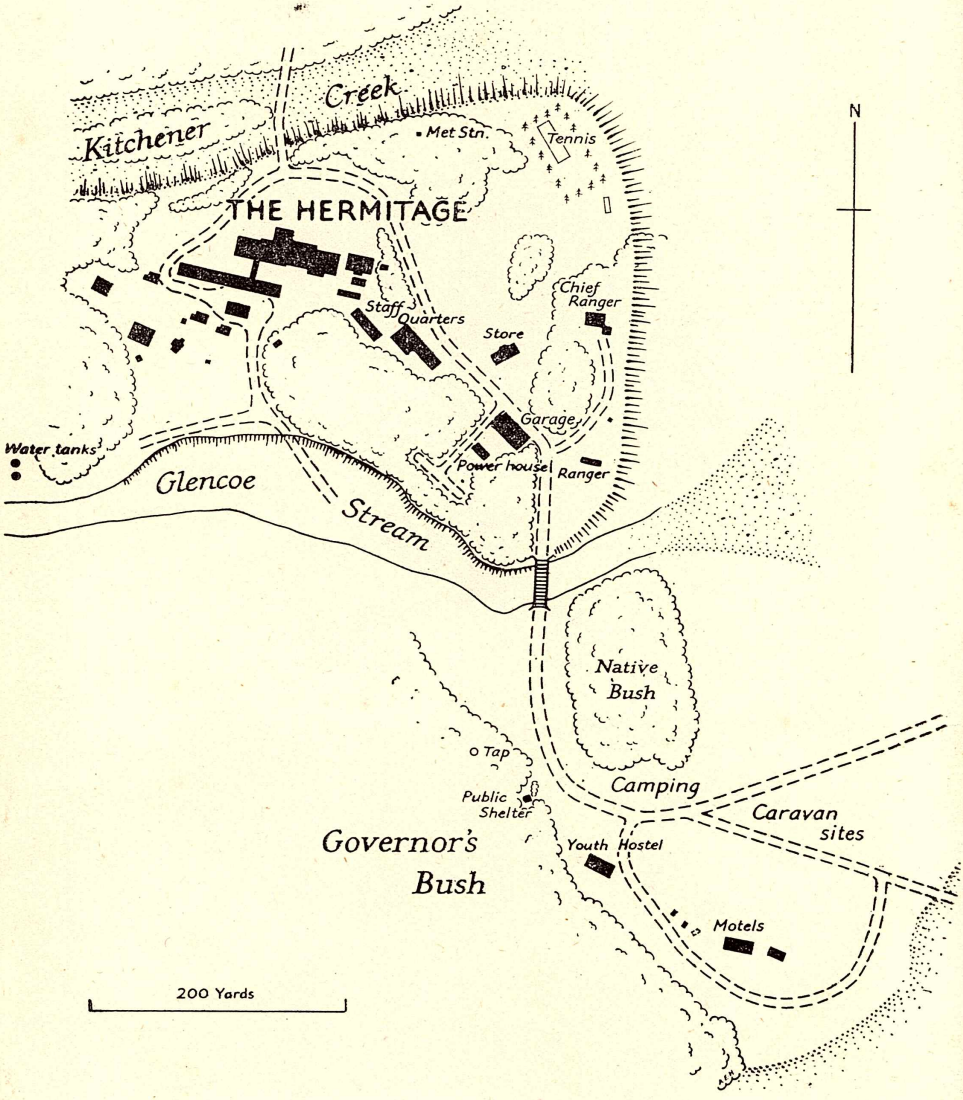
Within the limits of available manpower, Mount Cook National Park rangers are available for guiding individuals or parties, both on the shorter local walks and expeditions as well as for climbing. Persons interested in obtaining a guide should contact the Chief Ranger, from whom the various charges are also available.

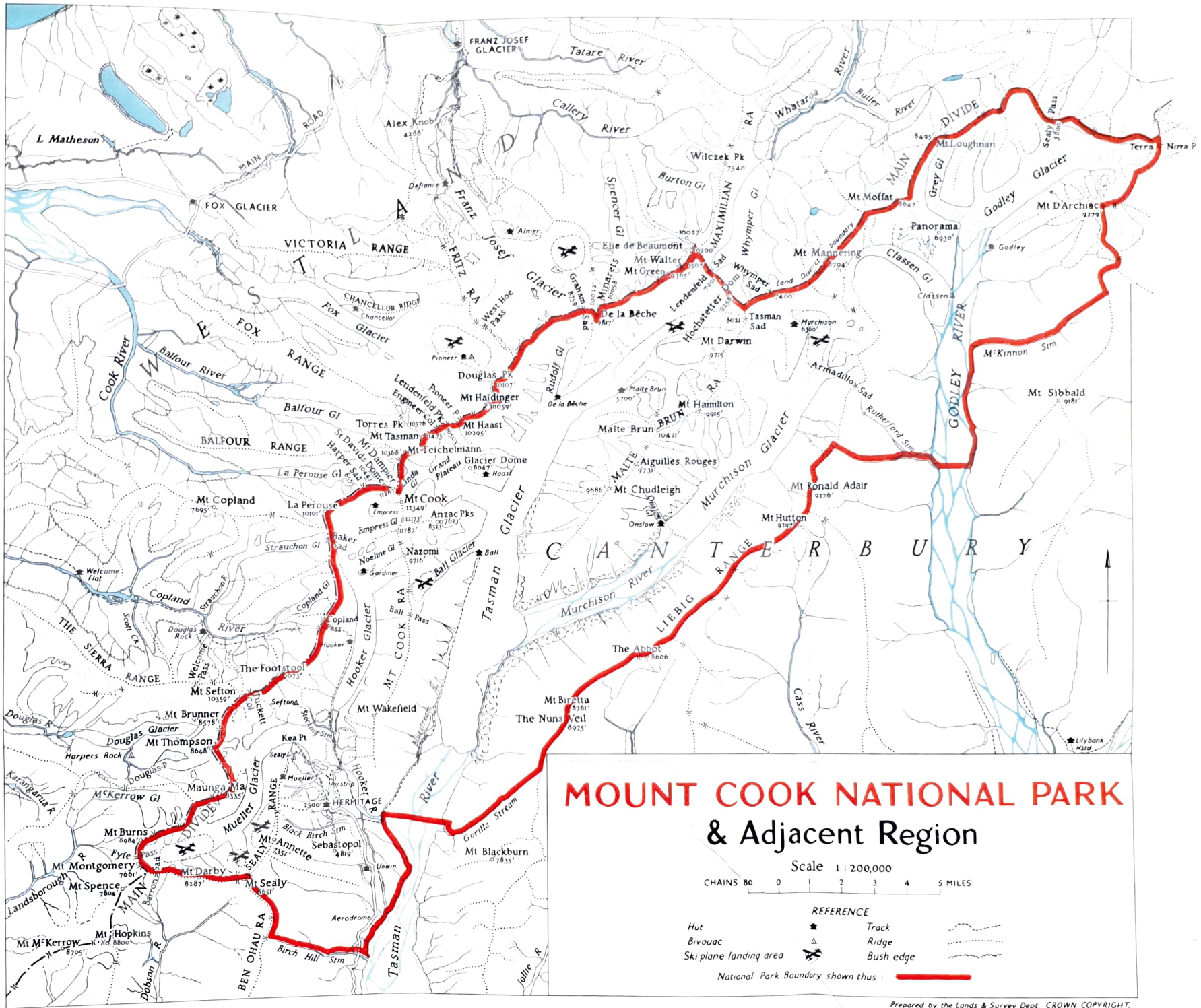
For climbing parties accompanied by a guide, stocks of food are available in all remote huts in the Park. The charge per day for food and hut fees is 35/- per person. This is in addition to the guiding fee of £3/3/- per day if the guide is accompanying one person, or £2/2/- each if the party consists of two persons.

NOTE: These fees are all subject to alteration without notice.

Matagouri

THE HERMITAGE TERRACE




MOUNT COOK NATIONAL PARK
& Adjacent Region
Scale 1 : 200,000
CHAINS 80 0 1 2 3 4 5 MILES
REFERENCE
Hut
Bivouac
Ski plane landing area
Track
Ridge
Bush edge
National Park Boundary shown thus
H A Wright Feb. 1959.
Prepared by the Lands & Survey Dept. CROWN COPYRIGHT.
FRANZ JOSEF GLACIER
FOX GLACIER
L Matheson
MAIN ROAD
WESTLAND
VICTORIA RANGE
FOX RANGE
BALFOUR RANGE
CHANCELLOR RIDGE
Cook River
Balfour River
Fox Glacier
Franz Josef Glacier
FRITZ RA
West Hoe Pass
Tatare River
Callery River
Alex Knob
Defiance
Almer
Pioneer
Douglas Pk
Mt Haidinger
Mt Haast
Torres Pk
Mt Tasman
Mt Teichelmann
Glacier Dome
Lendenfeld Pk
Engineer Col
Pioneer Pass
Rudolf Gl
De la Bêche
Graham Sad
Minarets
Spencer Gl
Elie de Beaumont
Mt Walter
Mt Green
Burton Gl
Wilczek Pk
MAXIMILIAN RA
Whymper Gl
Whymper Sad
Lendenfeld Sad
Hochstetter Dom
Tasman Sad
Mt Darwin
Malte Brun
Malte Brun RA
Mt Hamilton
Aiguilles Rouges
Mt Chudleigh
Onslow
Onslow Gl
Armadillo Sad
Rutherford Stm
Murchison Glacier
Murchison River
Mt Ronald Adair
Mt Hutton
The Abbot
LIEBIG RANGE
Mt Birretta
The Nuns Veil
Cass River
CANTERBURY
GODLEY RIVER
McKinnon Stm
Mt Sibbald
Mt Loughnan
Mt Moffat
Mt Mannering
Panorama
Mt D'Archiac
Grey Gl
Godley Glacier
Classen Gl
Classen
Godley
Murchison
Terra Nova P
Sealy Pass
Whataroa River
Butler River
DIVIDE
MAIN
RA
Mt Copland
La Perouse
La Perouse Gl
Mt Cook
Anzac Pks
Empress
Empress Gl
Baker Road
Strauchon Gl
Noeline Gl
Nazomi
Gardiner
Ball Glacier
Ball
Ball Pass
Tasman Glacier
Hooker Glacier
MT COOK RA
Copland Gl
Copland Pass
Hooker
Copland River
Strauchon R
Welcome Flat
Welcome Pass
Douglas Rock
Scott Cr
THE SIERRA RANGE
The Footstool
Mt Sefton
Mt Brunner
Mt Thompson
Douglas Glacier
Douglas R
Harpers Rock
Kea Pt
Sefton
Stocking Stm
Mt Wakefield
Mueller Glacier
Mueller
Hooker R
HERMITAGE
Maunga Ma
McKerrow Gl
Karangarua R
Mt Burns
Fyfe Pass
Mt Montgomery
Mt Spence
Mt Darby
Mt Sealy
SEALY RANGE
Mt Annette
Black Birch Stm
Sebastopol
Unwin
Aerodrome
Mt Blackburn
Gorilla Stream
Tasman River
Landsborough R
Barron Road
Mt McKerrow
Mt Hopkins
Dobson R
BEN OHAU RA
Birch Hill Stm
Jollie R
Lily bank Hstd

NMA